



COLLEGE **REFERENCE PAGES**

6.625" X 9"



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LANGUAGE ARTS *parts of speech*

NOUN	A WORD THAT NAMES A PERSON, PLACE, THING, QUALITY, ACT, OR FEELING.
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Common nouns are general and do not refer to a specific person, location, or object.

⇒ *Examples:* man, city, tonight, honesty, happiness

Proper nouns are capitalized and refer to a particular person, place, or thing.

⇒ *Examples:* Reggie, Market Square Arena, Saturday

PRONOUN	A WORD THAT TAKES THE PLACE OF A NOUN.
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Nominative Case Pronouns replace the subject of a sentence or clause.

⇒ *Examples:* *She* took the bus to visit Aunt Jane.

We are looking forward to visiting *that* region.

Objective Case Pronouns receive a verb's action or follow a preposition.

⇒ *Examples:* Please give *me* the papers.

Timothy's outstanding service earned *him* the award.

Possessive Case Pronouns show ownership or possession.

⇒ *Examples:* The sugar escaped from *its* cage.

Their car slid off *the* icy road.

VERB	A WORD THAT EXPRESSES ACTION OR A STATE OF BEING. IT ALSO INDICATES THE TIME, ACTION OR STATE OF BEING. A VERB HAS DIFFERENT FORMS DEPENDING ON ITS NUMBER, PERSON, VOICE, TENSE, AND MOOD.
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Number indicates whether a verb is singular or plural.

The verb and its subject must agree in number.

⇒ *Examples:* One dog barks. Two dogs bark.

Person indicates whether the subject of the verb is 1st, 2nd, or 3rd person and whether the subject is singular or plural.

Verbs usually have a different form only in *third person singular of the present tense*.

⇒ *Examples:* Singular Plural

1st Person: I stop. We stop.

2nd Person: You stop. You stop.

3rd Person: He/She/It stops. They stop.

Voice indicates whether the subject is the doer or receiver of the action verb.

⇒ *Examples:* Cathy wrote the letter. (active voice)

The letter was written by Cathy. (passive voice)

Tense indicates when the action or state of being is taking place.

⇒ *Examples:* We *need* the information now. (present)

Reggie *shot* the ball. (past)

You *will enjoy* the school play. (future)

ADVERB	A WORD THAT DESCRIBES OR MODIFIES A VERB, AN ADJECTIVE, OR ANOTHER ADVERB. AN ADVERB TELLS HOW, WHEN, WHERE, WHY, HOW OFTEN, AND HOW MUCH.
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⇒ *Examples:* The ball rolled *slowly* around the rim.

Soccer scores are reported *daily* in the newspaper.

ADJECTIVE	A WORD THAT DESCRIBES OR MODIFIES NOUNS AND PRONOUNS. ADJECTIVES SPECIFY COLOR, SIZE, NUMBER, AND THE LIKE.
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⇒ *Examples:* red, large, three, gigantic, miniature

Adjectives have three forms: **positive**, **comparative**, and **superlative**.

The **positive** form describes a noun or pronoun without comparing it to anything else.

⇒ *Example:* My apple pie is *good*.

The **comparative** form compares two things.

⇒ *Example:* Aunt Betty's apple pie is *better* than mine.

The **superlative** form compares three or more things.

⇒ *Example:* Mom's apple pie is the *best* of all!

PREPOSITION	A WORD (OR GROUP OF WORDS) THAT SHOWS HOW A NOUN OR PRONOUN RELATES TO ANOTHER WORD IN A SENTENCE.
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⇒ *Examples:* The man walked *into* the gym.

The horse leaped *over* the fence.

Their team won the meet *in spite of* several projects being injured.

CONJUNCTION	A WORD THAT CONNECTS INDIVIDUAL WORDS OR GROUPS OF WORDS.
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Coordinating conjunctions connect a word to a word, a clause to a clause, or a phrase to a phrase. The sentence elements joined by a coordinating conjunction must be equal. Common coordinating conjunctions are: *and, but, or, for, yet, so.*

Coordinating conjunctions used in pairs are called

correlative conjunctions. Common correlative

conjunctions are: *either, or; neither, nor; only, but also; both, and; whether, or.*

⇒ *Examples:* Both raccoons *and* squirrels frequently invade our bird feeders.

Neither Mary Ann *nor* Julie will be able to go with you.

Subordinating conjunctions connect and show the relationship between two clauses that are not equally important. Common subordinate conjunctions are: *until, unless, since, before, as, if, when, although, after,*

while, as long as, as if, though, whereas.

⇒ *Examples:* *Until* you decide to study, your grades won't improve.

If I hadn't already made plans, I would have enjoyed going to the mall with you.

INTERJECTION	A WORD THAT IS USED IN A SENTENCE TO COMMUNICATE STRONG EMOTION OR SURPRISE. PUNCTUATION IS USED TO SEPARATE AN INTERJECTION FROM THE REST OF THE SENTENCE.
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⇒ *Examples:* *Hooray!* We finally scored a touchdown.

Oh, no! I forgot the picnic basket.

Yes! Her gymnastic routine was perfect.

Ah, we finally get to stop and rest.



LANGUAGE ARTS *capitalization & plurals*

CAPITALIZATION

THE FOLLOWING CHART PROVIDES A QUICK OVERVIEW OF CAPITALIZATION RULES.

All proper nouns ⇒ Shannon O'Connor, Orlando, Bill of Rights
All proper adjectives ⇒ Kraft cheese, Bounty paper towels, Phillips screwdriver
The first word in every sentence ⇒ Her dress is stunning.
Races, languages, nationalities ⇒ Asian, French, African-American
Nouns/Pronouns that refer to a supreme being ⇒ God, Allah, Yahweh
Days of the week ⇒ Sunday, Monday, Tuesday
Formal epithets ⇒ Ivan the Terrible
Bodies of water ⇒ Amazon River, Lake Huron, Wea Creek
Cities, towns ⇒ Houston, Lafayette, Dearborn
Counties ⇒ Tippecanoe, Cork
Countries ⇒ U.S.A, Mexico, Canada
Continents ⇒ Africa, North America
Landforms ⇒ Mojave Desert, Appalachians
Holidays and holy days ⇒ Martin Lutherans Day, Christmas, Yom Kippur
Months ⇒ January, February
Official documents ⇒ Emancipation Proclamation
Official titles ⇒ President Obama, Mayor Bradley
Periods and events in history ⇒ Middle Ages, Renaissance
Planets, heavenly bodies ⇒ Mars, Jupiter, Milky Way
Public areas ⇒ Yellowstone National Park
Sections of a country or continent ⇒ the Northwest, the Middle East
Special events ⇒ Battle of Lexington
Streets, roads, highways ⇒ Rodeo Drive, Route 66, Interstate 65
Trade names ⇒ Honda Accord, Kellogg's Corn Flakes

PLURALS

THE FOLLOWING CHART PROVIDES A QUICK OVERVIEW OF PLURALIZATION RULES.

The plurals of most nouns are formed by adding *s* to the singular.

⇒ Examples: pie = pies | desk = desks | machine = machines

The plurals of nouns ending in *s*, *sh*, *x*, *z*, and *ch* are made by adding *es* to the singular.

⇒ Examples: bus = buses | dish = dishes | fox = foxes | buzz = buzzes | church = churches

The plurals of common nouns that end in *y* preceded by a consonant are formed by changing the *y* to *i* and adding *es*.

⇒ Examples: fly = flies | copy = copies

The plurals of words that end in *y* preceded by a vowel are formed by adding *ly s*.

⇒ Examples: holiday = holidays | monkey = monkeys

The plurals of words ending in *o* preceded by a vowel are formed by adding *o s*.

⇒ Examples: studio = studios | rodeo = rodeos

The plurals of words ending in *o* preceded by a consonant are formed by adding *s* or *es*.

⇒ Examples: hero = heroes | banjo = banjos | tomato = tomatoes | piano = pianos

The plurals of nouns ending in *f* or *fe* are formed in one of two ways:

{1} If the *f* sound is still heard in the plural form, simply add *s*.

⇒ Examples: roof = roofs | chief = chiefs

{2} If the final sound in the plural is a *ve* sound, change the *f* to *ve* and add *s*.

⇒ Examples: wife = wives | knife = knives

Foreign words and some English words form the plural by taking on an irregular spelling.

⇒ Examples: crisis = crises | criterion = criteria | goose = geese | ox = oxen

The plurals of symbols, letters, and figures are formed by adding an *s*.

⇒ Examples: 5 = 5s

The plural of nouns that end in *ful* are formed by adding *s* at the end of the word.

⇒ Examples: handful = handfuls | pailful = pailfuls | tankful = tankfuls



LANGUAGE ARTS *sentence structure & spelling rules*

SENTENCE STRUCTURE

A **complete sentence** must express a complete thought and must have a subject and a verb.

→ *Example:* He lost the game.

A **sentence fragment** results from a *missing* subject, verb or complete thought.

→ *Example:* Because he was lost.



THERE ARE FOUR TYPES OF SENTENCES: SIMPLE, COMPOUND, COMPLEX, OR COMPOUND-COMPLEX

A **simple sentence** consists of only *one* main clause. It expresses *one* complete thought and has one subject and one verb. A simple sentence may contain a compound subject, a compound verb, or both.

→ *Examples:* We enjoyed the concert.

Amy and Scott were married yesterday. (compound subject: Amy and Scott)

Ben is leaving work and going home. (compound verb: leaving and going)

A **compound sentence** contains two or more main clauses (in *italics*) connected by a conjunction, a semicolon, or a comma with a conjunction.

→ *Examples:* *Collecting fossils is fun*, but *I think identifying fossils is difficult*. (conjunction)

Andy's suitcase is new; *it just got back from the cleaners*. (semicolon)

Erin came home for Easter, and *Courtney went to Florida*. (comma/conjunction)

A **complex sentence** has one main clause (in *italics*) and one or more subordinate clauses (underlined).

→ *Examples:* *Dad says* that good grades are the result of diligent studying. (main clause, one independent clause)

Diligent studying is difficult, because I have to work several hours before I can start studying. (main clause, two dependent clauses)

A **compound-complex sentence** has two or more main clauses (in *italics*) and one or more subordinate clauses (underlined).

→ *Example:* Because the school bus broke down, *the team rode in a van*, and *the cheerleaders rode in cars*.

Unless my eyes are deceiving me, *Kristi is on that runaway horse*, and *Dale is behind her*.

SPELLING RULES

Write *i* before *e* except after *c*, or when sounded like *a* as in *weigh* and *right*.

→ *Exceptions:* seize, weird, either, neither

When the *ie/ei* combination is not pronounced *ee*, it is usually spelled *ei*.

→ *Examples:* reign, weigh, neighbor

→ *Exceptions:* friend, view, mischief, fiery

When a multi-syllable word ends in a consonant preceded by one vowel, the accent is on the last syllable and the suffix begins with a vowel — the same rule holds true when you double the final consonant.

→ *Examples:* prefer = preferred | allot = allotted | control = controlling

If a word ends with a silent *e*, drop the *e* before adding a suffix that begins with a vowel.

→ *Examples:* use = using | like = liking | state = stating | love = loving

When the suffix begins with a consonant, do not drop the *e*.

→ *Examples:* use = useful | state = statement | nine = ninety

→ *Exceptions:* argument, judgment, truly, ninth

When *y* is the last letter in a word and the *y* is preceded by a consonant, change the *y* to *i* before adding any suffix except those beginning with *i*.

→ *Examples:* lady = ladies | try = tries | happy = happiness | ply = pliable | fly = flying



LANGUAGE ARTS *the writing process*

WRITING VARIABLES

BEFORE BEGINNING ANY ASSIGNMENT, IT WILL HELP YOU TO FOCUS AND REMAIN CONSISTENT IN STYLE IF YOU CONSIDER THE FOLLOWING VARIABLES.

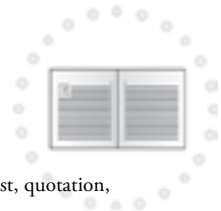
- Audience** For whom am I writing? A letter written to your ten-year-old sister will be much different in vocabulary, subject, content, format, and sentence complexity than one written to your senator.
- Topic** About what subject should I write? If possible, choose a subject that interests you. Research your subject well.
- Purpose** Why am I writing? Have a clear purpose in mind before starting your paper. Are you writing to entertain, instruct, inform, or persuade? Keeping your purpose in mind as you write will result in a paper that is focused and consistent.
- Voice** What point of view or "voice" will I use? Writers sometimes write from the point of view of another person rather than from their own point of view. This can add variety and help you see your subject in a new way. Make sure your "voice" remains consistent.
- Format** What form will my writing take? Different forms of writing, such as letters, diaries, reports, essays, research papers, etc., have specific requirements. Decide on the form your writing will take, and then make sure you know the requirements for that form of writing.

PLANNING AND WRITING AN ESSAY OR COMPOSITION

- {1} Select a general subject area that interests you.
- {2} Make a list of your thoughts and ideas about the subject.
- {3} Use your list to help focus on a specific topic within the subject area.
- {4} Decide what you want to say about the topic, and write an introductory statement that reflects this purpose.
- {5} Make a list of details to support your statement.
- {6} Arrange the list of details into an outline.
- {7} Do any reading and research necessary to provide additional support for specific areas of your outline. Keep a careful list of all of your sources for your bibliography.
- {8} Write a first draft.
- {9} Revise your first draft, making sure that:
 - {a} The introduction includes a clear statement of purpose.
 - {b} Each paragraph begins with a link to the preceding paragraph.
 - {c} Every statement is supported or illustrated.
 - {d} The concluding paragraph ties all of the important points together, leaving the reader with a clear understanding of the meaning of the essay or composition.
 - {e} Words are used and spelled correctly.
 - {f} Punctuation is correct.
- {10} Read your revised paper aloud to check how it sounds.
- {11} Proofread your revised paper two times: once for spelling, punctuation, and word usage, and again for meaning and effectiveness.



LANGUAGE ARTS *punctuation*



PERIOD •

Use: to end a sentence that makes a statement or that gives a command not used as an exclamation.

⇒ *Example:* Go to your room, and do not come out until dinner.

Use: after an initial or an abbreviation.

⇒ *Examples:* Mary J. Jones, Mr., Mrs., Ms.

COMMA ,

Use: to separate words or groups of words in a series.

⇒ *Example:* I used worms, minnows, *but* bread balls, and bacon for bait.

Note: Some stylebooks and teachers require a comma before “and” in a series.

⇒ *Example:* He ran, jumped, and yelled.

Use: to separate an explanatory phrase from the rest of the sentence.

⇒ *Example:* Escargot, *or snails*, are a delicacy that I relish.

Use: to distinguish items in an address and in a date.

⇒ *Examples:* John Doe, 290 Main St. Midtown, IN 48106
September 20, 2020

Use: to separate a title or an initial that follows a name.

⇒ *Example:* Joseph Jones, Ph.D.

QUESTION MARK ?

Use: at the end of a direct or indirect question.

⇒ *Example:* Did your relatives invite you to visit them this summer?

Use: to punctuate a short question within parentheses.

⇒ *Example:* I am leaving tomorrow (is that possible?) to visit my cousins in France.

APOSTROPHE ’

Use: to show that one or more letters or numbers have been left out of a word to form a contraction.

⇒ *Examples:* do not = don’t | I have = I’ve

Use: followed by an *s* is the possessive form of singular nouns.

⇒ *Example:* I clearly saw this young *man’s* car run that stop sign.

Use: possessive form of plural nouns ending in *s* is usually made by adding just an apostrophe. An apostrophe and *s* must be added to nouns not ending in *s*.

⇒ *Example:* bosses = bosses’, children’s

COLON :

Use: after words introducing a list, quotation, question, or example.

⇒ *Example:* Sarah dropped her book bag and our spilled everything: books, pens, pencils, homework, and makeup.

SEMICOLON ;

Use: to join compound sentences that are not connected by a conjunction.

⇒ *Example:* It is a rainy day, my dear Watson; the butler is clearly responsible.

Use: to separate groups of words.

⇒ *Example:* I packed a toothbrush, deodorant, and perfume; jeans, a raincoat, and sweatshirts; boots and tennis shoes.

QUOTATION MARKS “ ”

Use: to frame direct quotations in a sentence. Only the exact words quoted are placed within the quotation marks.

⇒ *Example:* “I don’t know,” she said, “if I will be able to accomplish this mission.”

Use: to distinguish a word that is being discussed.

⇒ *Example:* Mr. Jones suggested I replace the word “always” with “often” in my theme.

Use: to indicate that a word is slang.

⇒ *Example:* Julie only bought that outfit to show that she’s “with it.”

Use: to punctuate titles of poems, short stories, songs, lectures, course titles, chapters of books, and articles found in magazines, newspapers, and encyclopedias.

⇒ *Examples:* “You Are My Sunshine,” “Violence in Our Society,” “The Road Not Taken,”

SINGLE QUOTATION MARK ‘ ’

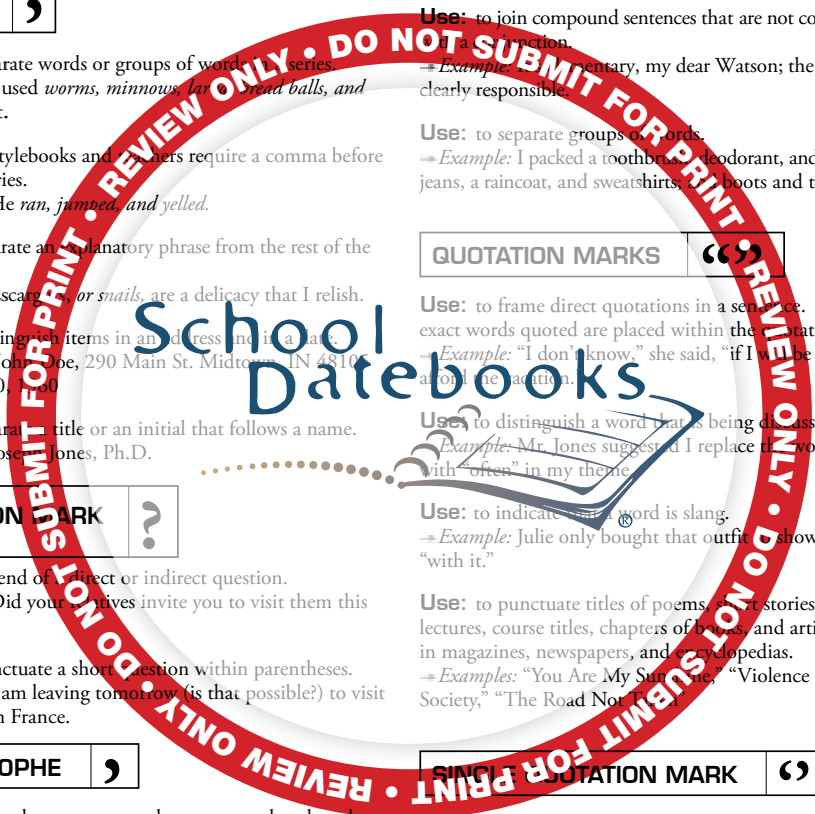
Use: to punctuate a quotation within a quotation.

⇒ *Example:* “My favorite song is ‘I’ve Been Working on the Railroad,’” answered little Joey.

EXCLAMATION MARK !

Use: to express strong feeling.

⇒ *Example:* Help! Help!





LANGUAGE ARTS *frequently confused words*



accept | to agree to something or receive something willingly

except | not including

→ *Examples:* Jonathon will *accept* the job at the restaurant.

Everyone was able to attend the ceremony *except* Phyllis.

capital | chief, important, excellent. Also the city or town that is the official seat of government of a state or nation

capitol | the building where a state legislature meets

the Capitol | the building in Washington, D.C., in which the United States Congress meets

→ *Examples:* The *capital* of France is Paris.

The *capitol* of Indiana is a building in Indianapolis.

The vice president arrived at the *Capitol* to greet the arriving senators.

hear | to listen to

here | in this place

→ *Examples:* Do you *hear* that strange sound?

The juice is right *here* in the refrigerator.

it's | the contraction for *it is* or *it has*

its | shows ownership or possession

→ *Examples:* It's early time to leave *for* the football game.

The wagon lost a wheel in the mud.

lead | a heavy, gray metal

lead | to go first, guide

led | the past tense of *lead*

→ *Examples:* Water pipes in many older homes are made of *lead*.

This path will *lead* us to the waterfall.

Bloodhounds *led* the police to the fugitive.

loose | free or not tight

lose | to misplace or suffer the loss of something

→ *Examples:* Since she lost weight, many of her clothes are *loose*.

If you *lose* your money, you will not be able to get into the park.

principal | the first or most important. It also refers to the head of a school.

principle | a rule, truth, or belief

→ *Examples:* Pineapple is one of the *principal* crops of Hawaii.

One *principle* of science is that all matter occupies space.

quiet | free from noise

quite | truly or almost completely

→ *Examples:* Our teacher insists that all students are *quiet* during a test.

This enchilada is *quite* spicy.

their | belonging to them

there | at that place

they're | the contraction for *they are*

→ *Examples:* *Their* new puppy is frisky.

We have all of the newspapers over *there*.

They're coming tonight.

to | in the direction of

too | also or very

two | the whole number between one and three

→ *Examples:* The paramedics rushed *to* the scene of the accident.

This meal is delicious, and it is low in fat, *too*.

Only *two* of the 10 runners were able to complete the race.

weather | the state of the atmosphere during to which no structure, pleasure, etc.

whether | a choice or alternative

→ *Examples:* We are hoping for warm, sunny *weather* for our family reunion.

We cannot decide *whether* we will drive or fly to the reunion.

Who's | the contraction for *who is* or *who has*

Whose | the possessive form of *who*

→ *Examples:* *Who's* in charge of the lighting for the stage?

Whose bicycle is out in the rain?

you're | the contraction for *you are*

your | the possessive form of *you*

→ *Examples:* She *led* to ask if *you're* planning to attend

this event.
Your term paper will be due four weeks from today.

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LANGUAGE ARTS *frequently misspelled words*

absence	cinnamon	enough	here	obedience	reference	therefore
absorb	climbed	entertain	history	occasion	referring	they
accept	climbing	envelope	hoping	occur	rein	they're
accidentally	clothes	equipment	hospital	occurred	reign	thief
accompany	colonel	equipped	humor	occurrence	relative	thoroughly
accuse	college	escape	humorous	occurring	relief	thought
ache	column	especially	hungry	often	religion	through
achieve	commercial	etc.	identify	opinion	remember	tobacco
acquaintance	committee	everybody	imagine	opportunity	repetition	together
acquire	completely	everywhere	immediate	opposite	repellent	tomorrow
affect	concentrate	exaggerate	immediately	original	reservoir	tragedy
afraid	conscious	exceed	immensely	other	restaurant	tried
against	conscious	excellence	incident	pageant	rhyme	trouble
aggression	continue	excellent	independent	parallel	rhythm	truly
aggressive	continuous	except	Indian	parents	ridiculous	two
all right	convenience	excitement	innocent	parliament	running	unique
a lot	convenient	exciting	instead	particular	Saturday	until
already	counterfeit	existence	intelligence	passed	scene	unusual
always	countries	expense	intelligent	peculiar	schedule	usually
amateur	courage	experiment	interpret	perform	scissors	vaccinate
ambition	courageous	experience	interrupt	permanent	search	vacuum
among	courageous	familiar	introduce	persuade	secret	vegetable
apology	criticism	families	its	phenomenon	secretary	village
apparent	criticism	fascinate	it's	piece	semester	villain
appearance	criticize	fasten	jealous	pilot	sense	weather
appreciate	curiosity	fatigue	know	plain	separate	Wednesday
arctic	curious	favorite	knowing	plane	separation	weight
argument	deceive	fiction	knowing	planned	sergeant	where
article	decide	fiction	laboratory	pleasant	shepherd	where
associate	definite	field	laid	poison	shining	whether
athlete	definitely	finally	leisure	possession	sincerely	which
attendance	depend	first	lightning	possible	soldier	whole
attitude	description	forecast	literature	practically	sophomore	whose
author	desert	foreign	lonely	prairie	speak	witch
awful	dessert	foresee	loose	precede	speech	woman
beautiful	deserve	forest	lying	preferred	sponsor	women
beauty	devote	foretell	magazine	prejudice	squirrel	wonderful
because	dictionary	formerly	magnificent	preparation	stationery	wreck
beginning	didn't	fragile	many	principal	stepping	writing
believe	difficult	freight	marriage	principle	strong	written
benefit	dinner	friend	mathematics	privilege	stories	wrote
bicycle	dining	friend	meant	probably	strengthen	yolk
biscuit	disappear	full	medicine	preference	stretch	your
boundary	disappoint	governor	millionaire	prophecy	studies	you're
Britain	disappoint	governor	minute	psychologist	studying	
brilliance	discipline	grabbed	mischievous	psychology	succeed	
brilliant	discussion	grammar	model	pursue	successful	
bureau	disease	grateful	mosquito	quantity	suggest	
business	dissatisfy	guarantee	narrative	quiet	summarize	
captain	doctor	guard	necessary	quite	summary	
career	does	guess	neighbor	raspberry	superintendent	
carrying	doesn't	guest	nervous	realize	suspense	
cemetery	dropping	handsome	niece	really	suspicion	
certain	during	happen	nineteen	receive	swimming	
challenge	easier	happiest	ninety	receiving	synagogue	
chief	easiest	happily	notice	recess	temperament	
children	easily	happiness	noticeable	recognize	themselves	
chocolate	effect	hear	nuisance	recommend	there	
chosen	either	height				
Christian	embarrass					

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LANGUAGE ARTS *outlining*

OUTLINING

OUTLINES CAN HELP YOU ORGANIZE YOUR IDEAS. YOU MIGHT USE AN OUTLINE TO PLAN A SPEECH, COMPOSITION, OR TERM PAPER. YOU ALSO MIGHT USE AN INFORMAL OUTLINE TO TAKE NOTES.

formal

A **formal outline** lists the main points of a topic and shows the relative importance of each and the order in which these points are presented. It also shows the relationships among them.

Formal Outline Format:

I.

A.

B.

1.

2.

a.

b.

(1)

(2)

(a)

(b)

II.

No new subdivision should be started unless there are at least two points to be listed in the new division. This means that each *I* must have a *2*; each *a* must have a *b*. Formal outlines may be either a **sentence outline** or a **topic outline**.

A **sentence outline** uses a complete sentence for each point and subpoint. A **topic outline** uses words or phrases for each point and subpoint.

informal

An **informal outline** uses as few words as possible. Supporting details are written below each heading. Numerals, letters, or dashes may be used. Informal outlines are especially useful for taking notes.

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⇒ Here is an example of a **formal** outline.

I. How lightning occurs

- cloud's particles collide and become electrically charged
- positively and negatively charged particles separate
- positively charged particles in cloud collide with negatively charged particles on ground

II. Forms of lightning

- forked
- streak
- ball lightning
- bead or chain
- ball

⇒ Here is an example of a **topic** outline.

Thesis or Introductory Statement

I. Gasoline shortage

A. Long lines

B. Gas "rationing"

II. Voluntary energy conservation

A. Gasoline

B. Electricity

C. Home heating fuel

III. Forced energy conservation

A. Fuel allocation

B. Speed limit

C. Airline flights

D. Christmas lighting

Conclusion



LANGUAGE ARTS *MLA style of documentation*

YOUR WORKS-CITED LIST	Your works-cited list should appear at the end of your essay. It provides the information necessary for a reader to locate and retrieve any source you cite in the essay. Each source you cite in the essay must appear in your works-cited list; likewise, each entry in the works-cited list must be cited in the text.
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According to the *Modern Language Association Handbook for Writers of Research Papers, 8th edition*:

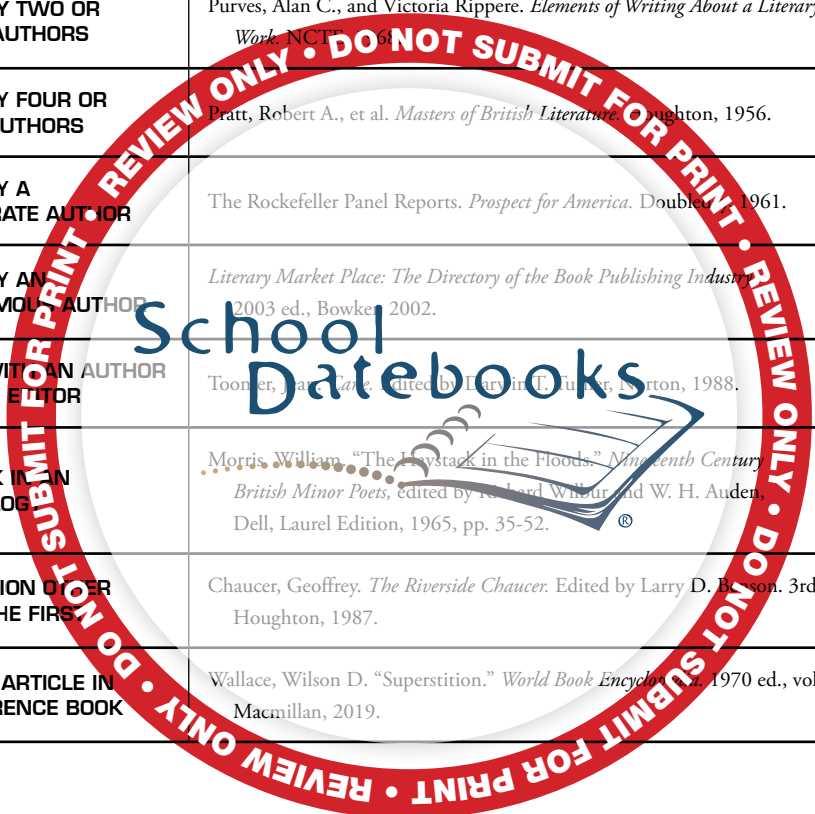
- {1} Double-space all entries.
- {2} Begin the first line of an entry flush with the left margin, and indent lines that follow by one-half inch.
- {3} List entries in alphabetical order by the author's last name. If you are listing more than one work by the same author, alphabetize the works according to title. Instead of repeating the author's name, type three hyphens followed by a period, and then give the title.
- {4} Italicize the titles of works published independently. Books, plays, long poems, pamphlets, periodicals, and films are all published independently.
- {5} If the title of a book you are citing is also the title of another book, italicize the title in title but not the other title.
- {6} Use quotation marks to indicate titles of short works included in larger works, song titles, and titles of unpublished works.
- {7} Separate the author, title, and publication information with a period followed by one space.
- {8} Use lowercase abbreviations to identify parts of a work (for example, vol. for volume), a name of a translator (trans.), and a named editor (ed.). However, when these designations follow a period, the first letter should be capitalized.
- {9} Use the shortened forms for the publisher's name. When the publisher's name includes the name of a person, cite the last name alone. When the publisher's name includes the name of more than one person, cite only the first of these names.
- {10} Use the phrase "Accessed 5 Jan. 2019" instead of listing the date or the abbreviation, "n.d."

ANY CITATION (GENERAL GUIDELINES)	Author. Title. Title of container (self contained if book), Other contributors (translator or editors), Version (edition), Number (vol. and/or issue), Publisher, Publication Date, Location (pages, paragraphs, URL, DOI), 2nd container's title, Other contributors, version, Number, Publisher, Publication date, Date of access (if applicable).
PAGE ON A WEBSITE	"How to Change Your Car Oil." <i>eHow</i> , 25 Sept. 2018, www.ehow.com/how_2018_how-oil.html. Accessed 5 Jan. 2019.
ARTICLE IN A JOURNAL FROM A WEBSITE (ALSO IN PRINT)	Doe, Jim. "Laws of the Open Sea." <i>Maritime Law</i> , vol. 3, no. 6, 2018, pp. 595-600, www.maritimelaw.org/article. Accessed 8 Feb. 2017.
ARTICLE IN A PERIODICAL (GENERAL GUIDELINES)	Author's last name, first name. "Article title." <i>Periodical</i> , vol. no. Day Month Year, pages.
BYLINED ARTICLE FROM A DAILY NEWSPAPER	Barringer, John. "Where Many Elders Live, Signs of the Future." <i>New York Times</i> , 7 Mar. 2018, p. A12.
UNBYLINED ARTICLE FROM A DAILY NEWSPAPER	"Infant Mortality Down; Race Disparity Widens." <i>Washington Post</i> , 12 Mar. 2018, p. A12.
ARTICLE FROM A MONTHLY OR BIMONTHLY MAGAZINE	Willis, Garry. "The Words that Remade America: Lincoln at Gettysburg." <i>Atlantic</i> , June 2019, pp. 57-79.
ARTICLE FROM A WEEKLY OR BIWEEKLY MAGAZINE	Hughes, Robert. "Futurism's Farthest Frontier." <i>Time</i> , 9 July 2019, pp. 58-59.
EDITORIAL	"A Question of Medical Sight." Editorial. <i>Plain Dealer</i> , 11 Mar. 2019, p. 6B.



LANGUAGE ARTS *MLA style of documentation*

BOOK (GENERAL GUIDELINES)	Author's last name, first name. <i>Book title</i> . Publisher, publication date.
BOOK BY ONE AUTHOR	Wheelen, Richard. <i>Sherman's March</i> . Crowell, 1978.
TWO OR MORE BOOKS BY THE SAME AUTHOR	Garreau, Joel. <i>Edge City: Life on the New Frontier</i> . Doubleday, 1991. ---. <i>The Nine Nations of North America</i> . Houghton, 1981.
BOOK BY TWO OR THREE AUTHORS	Purves, Alan C., and Victoria Rippere. <i>Elements of Writing About a Literary Work</i> . NCTE, 1961.
BOOK BY FOUR OR MORE AUTHORS	Pratt, Robert A., et al. <i>Masters of British Literature</i> . Houghton, 1956.
BOOK BY A CORPORATE AUTHOR	The Rockefeller Panel Reports. <i>Prospect for America</i> . Doubleday, 1961.
BOOK BY AN ANONYMOUS AUTHOR	<i>Literary Market Place: The Directory of the Book Publishing Industry</i> . 2003 ed., Bowker, 2002.
BOOK WITH AN AUTHOR AND AN EDITOR	Toomer, Jeanne Kane, edited by Marylin D. Turner, Norton, 1988.
A WORK IN AN ANTHOLOGY	Morris, William. "The Haystack in the Floods." <i>Nineteenth Century British Minor Poets</i> , edited by Richard Wilbur and W. H. Auden. Dell, Laurel Edition, 1965, pp. 35-52.
AN EDITION OTHER THAN THE FIRST	Chaucer, Geoffrey. <i>The Riverside Chaucer</i> . Edited by Larry D. Benson. 3rd ed., Houghton, 1987.
SIGNED ARTICLE IN A REFERENCE BOOK	Wallace, Wilson D. "Superstition." <i>World Book Encyclopedia</i> . 1970 ed., vol. 2, Macmillan, 2019.





LANGUAGE ARTS *APA style of documentation*

YOUR REFERENCE LIST

YOUR REFERENCE LIST SHOULD APPEAR AT THE END OF YOUR ESSAY. IT PROVIDES THE INFORMATION NECESSARY FOR A READER TO LOCATE AND RETRIEVE ANY SOURCE YOU CITE IN THE ESSAY. EACH SOURCE YOU CITE IN THE ESSAY MUST APPEAR IN YOUR REFERENCE LIST. LIKEWISE, EACH ENTRY IN THE REFERENCE LIST MUST BE CITED IN THE TEXT.

BASIC RULES

According to the seventh edition of the *Publication Manual of the American Psychological Association*:

- Indent your reference list one-half inch from the left margin, excluding the first line of each reference, which should remain flush left. This is called a hanging indent.
- Double-space all references.
- Capitalize only the first word of a title or subtitle of a work. Capitalize all major words in journal titles. Italicize titles of books and journals. Note that the italicizing of these entries includes commas and periods.
- Invert authors' names (last name first); give last name and initials for all authors of a particular work, unless the work has more than six authors (in this case, list the first six authors and then us et al. after the sixth author's name to indicate the rest of the authors). Alphabetize by authors' last names letter by letter. If you have more than one work by a particular author, order them by publication date, oldest to newest (that is, a 2008 article would appear before a 2009 article). When an author appears as a sole author and again as the first author of a group, list the one-author entries first. If no author is given for a particular source, alphabetize by the title of the piece in the reference list. Use a shortened version of the title for parenthetical citations within the text.
- Use "&" instead of "and" before the last author's name when listing multiple authors of a single work.

BASIC FORMS FOR SOURCES IN PRINT

An article in a periodical (such as a journal, newspaper, or magazine)

- Author, A. A. & Author, B. B., & Author, C. C. (Year of publication, month day). *Title of article*.

Title of Periodical, volume number (issue number), pages.

You need to list only the volume number if the periodical uses continuous pagination throughout a particular volume. If an issue begins with page 1, then you should list the issue number as well. Title of Periodical, volume number (issue number), pages.

A nonperiodical (such as a book, report, brochure or audiovisual media)

- Author, A. A. (Year of publication). *Title of work: Capital letter also for subtitle* (Edition). Publisher.

Do not include the location of the publisher in the citation.

Part of a nonperiodical (such as a book chapter or an article in a collection)

- Author, A. A., & Editor, B. B. (Year of publication). Title of chapter. In A. Editor & B. Editor (Eds.), *Title of book* (pages of chapter). Publisher.

When you list the pages of the chapter or essay in parentheses after the book title, use "pp." before the numbers (pp. 1-21). This abbreviation, however, does not appear before page numbers in periodical references, except for newspapers.

BASIC FORMS FOR ELECTRONIC SOURCES

A web page

- Author, A. A. (Date of publication or revision). *Title of page*. Site name. URL

An online journal or magazine

- Author, A. A., & Author, B. B. (Date of publication). Title of article. *Title of Journal, volume number* (issue number), page range.
doi:0000000/000000000000

Since online materials can potentially change URLs, APA recommends providing a Digital Object Identifier (DOI), when it is available, as opposed to the URL. DOIs are unique to their documents and consist of a long alphanumeric code.

An online journal or magazine (with no DOI assigned)

- Author, A. A., & Author, B. B. (Date of publication). Title of article. *Title of Journal, volume number* (issue number), page range.
URL

Email

Because email is a personal communication, not easily retrieved by the general public, no entry should appear in your reference list. Instead, parenthetically cite in text the communicator's name, the fact that it was personal communication, and the date of the communication: The novelist has repeated this idea recently (S. Rushdie, personal communication, May 1, 1995).



LANGUAGE ARTS *APA style of documentation*

EXAMPLES

Journal article, one author

- ⇒ Harlow, H. F. (1983). Fundamentals for preparing psychology journal articles. *Journal of Comparative and Physiological Psychology*, 55, 893-896.

Journal article, more than one author

- ⇒ Kernis, M. H., Cornell, D. P., Sun, C. R., Berry, A., & Harlow, T. (1993). There's more to self-esteem than whether it is high or low: The importance of stability of self-esteem. *Journal of Personality and Social Psychology*, 65, 1190-1204.

Work discussed in a secondary source

- ⇒ Coltheart, M., Curtis, B., Atkins, P., & Haller, M. (1993). Models of reading: Parallel and dual-route and parallel-distributed-processing approaches. *Psychological Review*, 100, 589-608.

Give the secondary source in the reference list; in the text, name the original work, and give a citation to the secondary source. For example, if Seidenberg and McClelland's study is cited in Coltheart et al. and you did not read the original work, list the Coltheart et al. reference in your reference list. In the text, use the following citation:

- ⇒ In Seidenberg and McClelland's study (as cited in Coltheart, Curtis, Atkins, & Haller, 1993), ...

Magazine article, one author

- ⇒ Henry, W. A., III. (1990, April 9). Making the grade in today's schools. *Time*, 135, 28-31.

Book

- ⇒ Calfee, R. C., Valencia, R. R. (1991). *APA guide to preparing manuscripts for journal publication*. American Psychological Association.

An article or chapter of a book

- ⇒ O'Neil, J. M., & Egan, J. (1992). Men's and women's gender role journeys: Metaphor for healing, transition, and transformation. In B. R. Wainrib (Ed.), *Gender issues across the life cycle* (pp. 107-123). Springfield.

A government publication

- ⇒ National Institute of Mental Health. (1990). *Clinical training in serious mental illness* (DHHS Publication No. ADM 90-1679). U.S. Government Printing Office.

A book or article with no author or editor named

- ⇒ *Merriam-Webster's collegiate dictionary* (11th ed.). (2005). Merriam-Webster.
 - ⇒ New drug appears to cut risk of death from heart failure. (1993, July 15). *The Washington Post*, p. A12.
- For parenthetical citations of sources in text with no author named, use a shortened version of the title instead of an author's name. Use quotation marks and italics as appropriate. For example, parenthetical citations of the two sources above could appear as follows: (Merriam-Webster's, 2005) and ("New Drug," 1993).

A translated work and/or an unpublished work

- ⇒ Laplace, P. S. (1951). *A philosophical theory of probabilities* (F. W. Truscott & F. L. Emory, Trans.). Dover. (Original work published 1814).

A review of a book, film, television program, etc.

- ⇒ Baumeister, R. F. (1993). Exposing the self-knowledge myth [Review of the book *The self-knower: A hero under control*]. *Contemporary Psychology*, 38, 466-467.

An entry in an encyclopedia

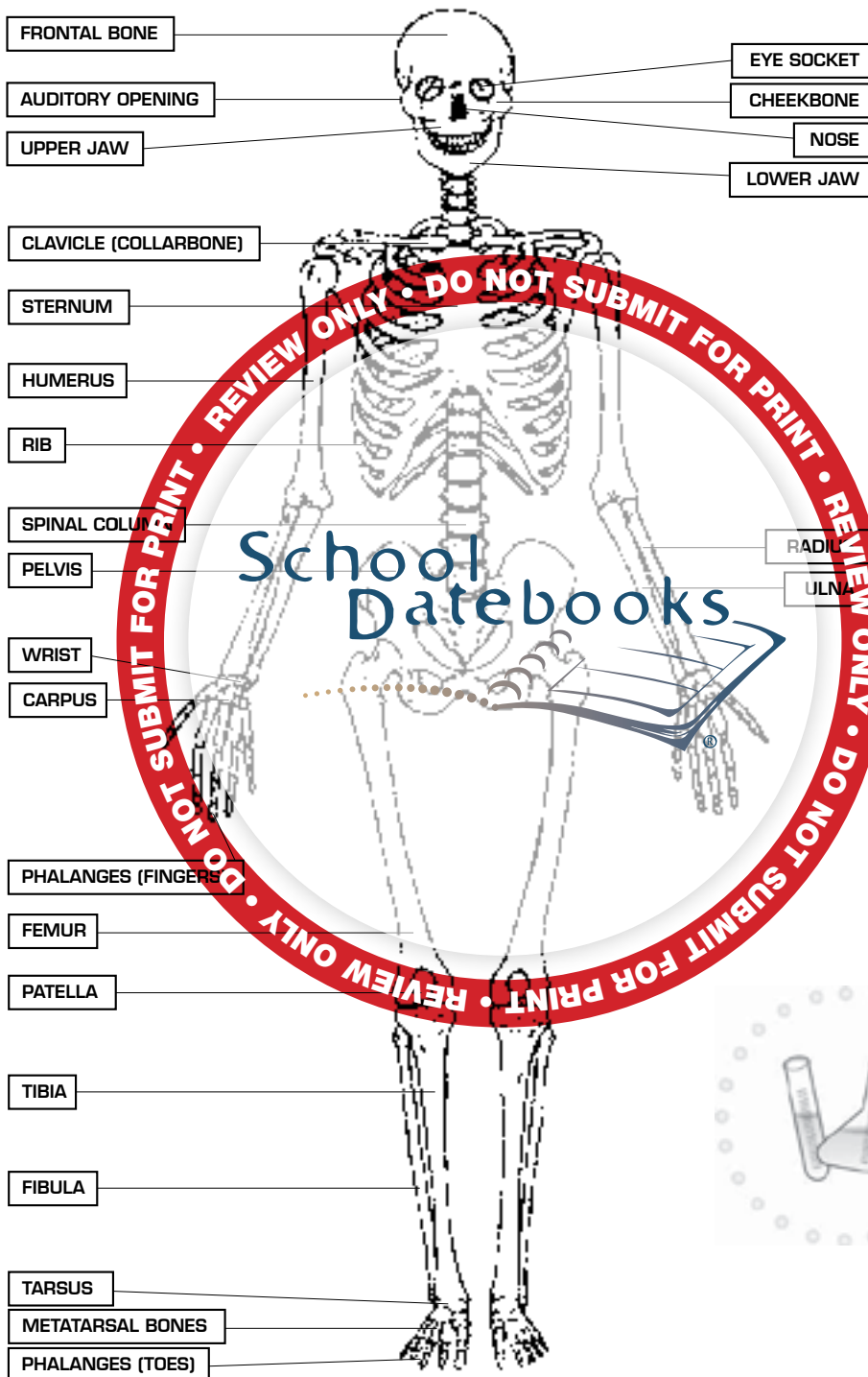
- ⇒ Bergmann, P. G. (1993). Relativity. In *The new encyclopaedia britannica* (Vol. 26, pp. 501-508). Encyclopaedia Britannica.

An online journal article (no DOI assigned)

- ⇒ Kenneth, I. A. (2000). A Buddhist response to the nature of human rights. *Journal of Buddhist Ethics*, 8. <http://www.buddhistethics.org/2/inada1>

A web page

- ⇒ Daly, B. (1997). *Writing argumentative essays*. <http://www.ltn.lv/~markir/essaywriting/frntpage.htm>



[illegible]

Updated 9.2022

Source: The International Union of Pure and Applied Chemistry (IUPAC). Encyclopaedia Britannica, and others.



SCIENCE *physics laws & formulas*

Mass Density

$$\text{mass density} = \frac{\text{mass}}{\text{volume}}$$

Speed

$$\text{average speed} = \frac{\text{distance covered}}{\text{elapsed time}}$$

Acceleration

$$a = \frac{\Delta v}{\Delta t} \quad \text{or} \quad \frac{v_F - v_I}{t_F - t_I}$$

(a=average acceleration; v=velocity; t=time; v_F =final velocity; v_I =initial velocity; t_F =final time; t_I =initial time)

Law of Universal Gravitation

$$F = G \frac{m_1 m_2}{d^2}$$

(F=force of attraction; m_1 and m_2 =the masses of the two bodies; d=distance between the centers of m_1 and m_2 ; G=gravitational constant)

Work Done by a Force

$$\text{work} = (\text{force})(\text{distance})$$

Power

$$\text{power} = \frac{\text{work}}{\text{time}} \quad (\text{see above formula for work})$$

Kinetic Energy

$$KE = \frac{mv^2}{2}$$

(KE=kinetic energy; m=mass; v=velocity)

Specific Heat

$$Q = cm\Delta t$$

(Q=quantity of heat; c=specific heat; m=mass; Δt =change in temperature)

Electric Current - strength

$$I = \frac{Q}{t}$$

(I=the current strength; Q=quantity of charge; t=time)

Momentum

$$\text{momentum} = (\text{mass})(\text{velocity})$$

Mass-Energy Equivalence

$$E = mc^2$$

(E=the energy [measured in ergs] equivalent to a mass m [measured in grams]; c=speed of light [measured in centimeters per second])

Power Expended in an Electric Appliance

$$P = IV$$

(P=power in watts; I=current; V=voltage)

Newton's Second Law of Motion

$$\text{force} = (\text{mass})(\text{acceleration})$$

Torque

$$T = FR$$

(T=torque; F=force; R=radius)

Boyle's Law when temperature constant:

$$p_1 V_1 = p_2 V_2$$

(p_1 =original pressure; p_2 =new pressure; V_1 =original volume; V_2 =new volume)

Wave Motion

$$v = nl$$

(v=wave velocity; n=wave frequency; l=wavelength)

Illumination on a Surface Perpendicular to the Luminous Flux

$$E = \frac{I}{r^2}$$

(E=illumination; I=intensity of the source; r=distance from source to surface perpendicular to the beam)

Focal Length of Mirrors and Lenses

$$\frac{1}{f} = \frac{1}{d_o} + \frac{1}{d_i}$$

(f=focal length; d_o =object distance; d_i =image distance)

Images in Mirrors and Lenses

$$\frac{h_i}{d_i} = \frac{h_o}{d_o}$$

(h_i =image height; h_o =object height; d_i =image distance; d_o =object distance)

Ohm's Law

$$I = \frac{V}{R}$$

(I=strength of the current flowing in a conductor; V=the potential difference applied to its ends; R=its resistance)





SCIENCE *unit conversions*

ENGLISH TO METRIC CONVERSIONS

To Convert→	Multiply By→	To Find→
AREA		
square inches	6.45	square centimeters
square feet	0.09	square meters
square miles	2.59	square kilometers
acres	0.40	hectares
LENGTH		
inches	2.54	centimeters
feet	0.30	meters
yards	0.91	meters
miles	1.61	kilometers
MASS AND WEIGHT		
ounces	28.35	grams
pounds	0.45	kilograms
pounds-force	4.45	newtons
short tons	0.91	metric tons
VOLUME		
cubic inches	16.39	cubic centimeters
cubic feet	0.03	cubic meters
quarts	0.95	liters
gallons	3.79	liters

METRIC TO ENGLISH CONVERSIONS

To Convert→	Multiply By→	To Find→
AREA		
square centimeters	0.16	square inches
square meters	10.76	square feet
square kilometers	0.39	square miles
hectares	2.47	acres
LENGTH		
centimeters	0.39	inches
meters	3.28	feet
meters	1.09	yards
kilometers	0.62	
MASS AND WEIGHT		
grams	0.04	ounces
kilograms	2.20	pounds
newtons	0.23	pound-force
metric tons	1.10	short tons
VOLUME		
cubic centimeters	0.06	cubic inches
cubic meters	35.31	cubic feet
liters	1.06	quarts
liters	0.26	gallons



TEMPERATURE

Fahrenheit to Celsius:
 subtract 32,
 then multiply by 5
 and divide by 9.

Celsius to Fahrenheit:
 multiply by 9,
 divide by 5,
 then add 32.



SCIENCE *weights & measures & formulas*

WEIGHTS AND MEASURES

ENGLISH

Area

1 square foot (ft ²)	144 square inches (in ²)
1 square yard (yd ²)	9 square feet
1 acre	43,560 square feet
1 square mile (mi ²)	640 acres

Capacity

1 cup (c)	8 fluid ounces (fl oz)
1 pint (pt)	2 cups
1 quart (qt)	4 cups
1 gallon (gal)	4 quarts

Length

1 foot (ft)	12 inches (in)
1 yard (yd)	36 inches
1 yard	3 feet
1 mile (mi)	5,280 feet
1 mile	1,760 yards

Time

1 minute (min)	60 seconds (s)
1 hour (h)	60 minutes
1 day (d)	24 hours
1 week (wk)	7 days
1 year (yr)	12 months (mo)
1 year	52 weeks
1 year	365 days
1 century (c)	100 years

Weight

1 pound (lb)	16 ounces (oz)
1 short ton (T)	2,000 pounds

METRIC

Area

1 sq centimeter (cm ²)	100 sq millimeters (mm ²)
1 sq meter (m ²)	10,000 sq centimeters
1 hectare (ha)	10,000 square meters
1 sq kilometer (km ²)	1,000,000 sq meters

Capacity

1 milliliter (mL)	.001 liter (L)
1 centiliter (cL)	.01 liter
1 deciliter (dL)	.1 liter
1 dekaliter (daL)	10 liters
1 hectoliter (hL)	100 liters
1 kiloliter (kL)	1,000 liters

Length

1 millimeter (mm)	.001 meter (m)
1 centimeter (cm)	.01 meter
1 decimeter (dm)	.1 meter
1 dekameter (dam)	10 meters
1 hectometer (hm)	100 meters
1 kilometer (km)	1,000 meters

Mass /Weight

1 milligram (mg)	.001 gram (g)
1 centigram (cg)	.01 gram
1 decigram (dg)	.1 gram
1 dekagram (dag)	10 grams
1 hectogram (hg)	100 grams
1 kilogram (kg)	1,000 grams
1 metric ton (t)	1,000 kilograms

FORMULAS

Perimeter of a rectangle	$P = 2(l + w)$
Perimeter of a square	$P = 4s$
Perimeter of a regular polygon	$P = ns$
(n = number of sides)	
Area of a rectangle	$A = lw$
Area of a square	$A = s^2$
Area of a parallelogram	$A = bh$
Area of a triangle	$A = \frac{1}{2}bh$
Area of a trapezoid	$A = \frac{1}{2}h(b_1 + b_2)$
Area of a circle	$A = \pi r^2$
Circumference of a circle	$C = \pi d$, or $2\pi r$
Volume of a rectangular prism	$V = lwh$
Volume of any prism	$V = Bh$
Volume of a cylinder	$V = \pi r^2 h$
Volume of a pyramid	$V = \frac{1}{3}Bh$
Volume of a cone	$V = \frac{1}{3}\pi r^2 h$
Surface area of a cylinder	$SA = 2\pi r^2 + 2\pi rh$
Pythagorean Theorem	$a^2 + b^2 = c^2$
(sides of a right triangle)	

Simple interest	$I = prt$
Distance	$d = rt$

FORMULA KEY

A = area
b = base, length of any side of a plane figure
B = area of base
h = height, perpendicular distance from the furthest point of the figure to the extended base
l = length
P = perimeter
r = radius
s = side
sa = surface area
V = volume
w = width

I = interest, p = principal, r = rate, t = time
d = distance, r = rate, t = time



MATHEMATICS *Roman numerals & place value*

ROMAN NUMERALS

IN THE ROMAN NUMBER SYSTEM, NUMERALS ARE REPRESENTED BY 7 CAPITAL LETTERS FROM OUR ALPHABET. THESE LETTERS ARE COMBINED IN DIFFERENT WAYS TO FORM NUMBERS. THE VALUES OF THE LETTERS ARE ADDED TOGETHER, UNLESS A LETTER WITH A LESSER VALUE COMES BEFORE ONE WITH A LARGER VALUE. IN THIS CASE, THE VALUE IS THE DIFFERENCE OF THE TWO LETTER VALUES.

FOLLOWING ARE THE 7 LETTERS AND THEIR VALUES:

I	→ one
V	→ five
X	→ ten
L	→ fifty
C	→ one hundred
D	→ five hundred
M	→ one thousand

{1}=I
{2}=II
{3}=III
{4}=IV
{5}=V
{6}=VI
{7}=VII
{8}=VIII
{9}=IX
{10}=X
{11}=XI
{12}=XII
{13}=XIII
{14}=XIV
{15}=XV
{16}=XVI
{17}=XVII
{18}=XVIII
{19}=XIX
{20}=XX
{30}=XXX
{40}=XL
{50}=L
{60}=LX
{70}=LXX
{80}=LXXX
{90}=XC
{100}=C
{500}=D
{1000}=M

PLACE VALUE

Hundred Trillions	Ten Trillions	One Trillions	Ten Billions	One Billions	Hundred Millions	Ten Millions	One Millions	Hundred Thousands	Ten Thousands	One Thousands	Hundreds	Tens	Ones
1	5	4	9	9	7	1	5	4	6	2	1	0	0

Read this number as one hundred fifty-four trillion, three hundred ninety-nine billion, seven hundred fifteen million, four hundred sixty-two thousand, one hundred. **Write** this number as 154,399,715,462,100.

Number	Zeros
Thousand	3
Million	6
Billion	9
Trillion	12
Quadrillion	15
Quintillion	18
Sextillion	21
Septillion	24
Octillion	27
Nonillion	30
Decillion	33
Googol	100

NUMBER PREFIXES

uni-	one
bi-	two
tri-	three
quadri-	four
quint-	five
sex-	six
sept-	seven
oct-	eight
non-	nine
deci-	ten



MATHEMATICS *squares & square roots*

SQUARES & SQUARE ROOTS

N	N ²	\sqrt{N}	N	N ²	\sqrt{N}	N	N ²	\sqrt{N}
1	1	1.00	51	2,601	7.14	101	10,201	10.05
2	4	1.41	52	2,704	7.21	102	10,404	10.10
3	9	1.73	53	2,809	7.28	103	10,609	10.15
4	16	2.00	54	2,916	7.35	104	10,816	10.20
5	25	2.24	55	3,025	7.42	105	11,025	10.25
6	36	2.45	56	3,136	7.48	106	11,236	10.30
7	49	2.65	57	3,249	7.55	107	11,449	10.34
8	64	2.83	58	3,364	7.62	108	11,664	10.39
9	81	3.00	59	3,481	7.68	109	11,881	10.44
10	100	3.16	60	3,600	7.75	110	12,100	10.49
11	121	3.32	61	3,721	7.81	111	12,321	10.54
12	144	3.46	62	3,844	7.87	112	12,544	10.58
13	169	3.61	63	3,969	7.94	113	12,769	10.63
14	196	3.74	64	4,096	8.00	114	12,996	10.68
15	225	3.87	65	4,225	8.06	115	13,225	10.72
16	256	4.00	66	4,356	8.12	116	13,456	10.77
17	289	4.12	67	4,489	8.19	117	13,689	10.82
18	324	4.24	68	4,624	8.25	118	13,924	10.86
19	361	4.30	69	4,761	8.31	119	14,161	10.91
20	400	4.47	70	4,900	8.37	120	14,400	10.95
21	441	4.58	71	5,041	8.43	121	14,641	11.00
22	484	4.69	72	5,184	8.49	122	14,884	11.05
23	529	4.80	73	5,329	8.54	123	15,129	11.09
24	576	4.90	74	5,476	8.60	124	15,376	11.14
25	625	5.00	75	5,625	8.66	125	15,625	11.18
26	676	5.10	76	5,776	8.72	126	15,876	11.22
27	729	5.20	77	5,929	8.77	127	16,129	11.27
28	784	5.29	78	6,084	8.83	128	16,384	11.31
29	841	5.39	79	6,241	8.89	129	16,641	11.36
30	900	5.48	80	6,400	8.94	130	16,900	11.40
31	961	5.57	81	6,561	9.00	131	17,161	11.45
32	1,024	5.66	82	6,724	9.06	132	17,424	11.49
33	1,089	5.75	83	6,889	9.11	133	17,689	11.53
34	1,156	5.83	84	7,056	9.17	134	17,956	11.58
35	1,225	5.92	85	7,225	9.22	135	18,225	11.62
36	1,296	6.00	86	7,396	9.27	136	18,496	11.66
37	1,369	6.08	87	7,569	9.33	137	18,769	11.70
38	1,444	6.16	88	7,744	9.38	138	19,044	11.75
39	1,521	6.24	89	7,921	9.43	139	19,321	11.79
40	1,600	6.32	90	8,100	9.49	140	19,600	11.83
41	1,681	6.40	91	8,281	9.54	141	19,881	11.87
42	1,764	6.48	92	8,464	9.59	142	20,164	11.92
43	1,849	6.56	93	8,649	9.64	143	20,449	11.96
44	1,936	6.63	94	8,836	9.70	144	20,736	12.00
45	2,025	6.71	95	9,025	9.75	145	21,025	12.04
46	2,116	6.78	96	9,216	9.80	146	21,316	12.08
47	2,209	6.86	97	9,409	9.85	147	21,609	12.12
48	2,304	6.93	98	9,604	9.90	148	21,904	12.17
49	2,401	7.00	99	9,801	9.95	149	22,201	12.21
50	2,500	7.07	100	10,000	10.00	150	22,500	12.25



MATHEMATICS *algebra & mathematical symbols*

ALGEBRA

Expanding

- {1} $a(b+c) = ab+ac$
- {2} $(a+b)^2 = a^2+2ab+b^2$
- {3} $(a-b)^2 = a^2-2ab+b^2$
- {4} $(a+b)(a+c) = a^2+ac+ab+bc$
- {5} $(a+b)(c+d) = ac+ad+bc+bd$
- {6} $(a+b)^3 = a^3+3a^2b+3ab^2+b^3$
- {7} $(a-b)^3 = a^3-3a^2b+3ab^2-b^3$
- {8} $a^2-b^2 = (a+b)(a-b)$
- {9} $a^3+b^3 = (a+b)(a^2-ab+b^2)$
- {10} $a^3b-ab = ab(a+1)(a-1)$
- {11} $a^2-2ab+b^2 = (a-b)^2$
- {12} $a^3-b^3 = (a-b)(a^2+ab+b^2)$

Laws of Exponents

- {1} $a^r a^s = a^{r+s}$
- {2} $a^r / a^s = a^{r-s}$
- {3} $a^r a^s / a^p = a^{r+s-p}$
- {4} $(a^r)^s = a^{rs}$
- {5} $(ab)^r = a^r b^r$
- {6} $(a/b)^r = a^r / b^r (b \neq 0)$
- {7} $a^0 = (a \neq 0)$
- {8} $a^{-r} = 1/a^r (a \neq 0)$

if r and s are positive integers

Logarithms

- {1} $\text{Log}(xy) = \text{Log } x + \text{Log } y$
- {2} $\text{Log } x^r = r \text{Log } x$
- {3} $\text{Log } x = n \iff x = 10^n$ (Common log)
- {4} $\text{Log}_a x = n \iff x = a^n$ (Log to the base a)
- {5} $\text{Ln } x = n \iff x = e^n$ (Natural log)
- {6} $\text{Log}(x/y) = \text{Log } x - \text{Log } y$

Quadratic Formula

When given a formula in the form of a quadratic equation:-

$$ax^2+bx+c=0$$

The solution can be derived using the quadratic formula:-

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

MATHEMATICAL SYMBOLS

+	plus	>	greater than	○	circle
-	minus	<	less than	⊙	anti-circle
±	plus or minus	≥	greater than or equal to	□	square
×	multiplied by	≤	less than or equal to	▭	rectangle
÷	divided by	∞	infinity	▭	parallelogram
=	equal to	:	is to (ratio)	△	triangle
≠	not equal to	∝	as (proportion)	∠	angle
≈	nearly equal to	π	pi (=3.14159)	⊥	right angle
√x	square root of x	∴	therefore	⊥	perpendicular
∛x	--- root of x	∵	because		parallel
%	percentage	x	absolute value of x	°	degrees
Σ	sum of	...	and so on	'	minutes



MATHEMATICS *fractions & percentages & multiplication table*

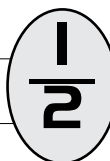
FRACTIONS AND PERCENTAGES

1	=	1.0	=	100%
3/4	=	0.75	=	75%
2/3	=	0.667	=	66.7%
1/2	=	0.5	=	50%
1/3	=	0.333	=	33.3%
1/4	=	0.25	=	25%
1/5	=	0.2	=	20%
1/6	=	0.167	=	16.7%
1/7	=	0.142	=	14.2%
1/8	=	0.125	=	12.5%
1/9	=	0.111	=	11.1%
1/10	=	0.1	=	10%
1/11	=	0.091	=	9.1%
1/12	=	0.083	=	8.3%

WORKING WITH FRACTIONS

The top number of a fraction is called the **numerator**.

The bottom number of a fraction is called the **denominator**.



To multiply:

$$\frac{1}{2} \times \frac{3}{4} = \frac{1 \times 3}{2 \times 4} = \frac{3}{8}$$

To divide, multiply the first fraction with the reciprocal of the other:

$$\frac{2}{3} \div \frac{1}{6} = \frac{2}{3} \times \frac{6}{1} = \frac{2 \times 6}{3 \times 1} = 4$$

To add or subtract, first find the common denominator:

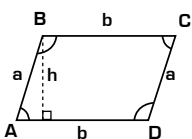

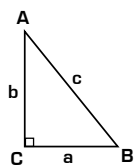
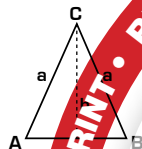
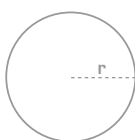
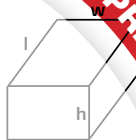

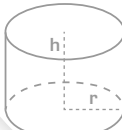

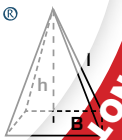
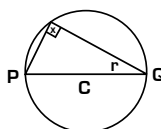
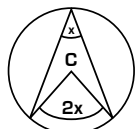
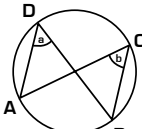
$$\frac{1}{3} + \frac{2}{5} = \frac{(1 \times 5)}{3 \times 5} + \frac{(2 \times 3)}{5 \times 3} = \frac{5}{15} + \frac{6}{15} = \frac{11}{15}$$

MULTIPLICATION TABLE

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
2	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
3	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60
4	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80
5	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
6	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
7	7	14	21	28	35	42	49	56	63	70	77	84	91	98	105	112	119	126	133	140
8	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120	128	136	144	152	160
9	9	18	27	36	45	54	63	72	81	90	99	108	117	126	135	144	153	162	171	180
10	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
11	11	22	33	44	55	66	77	88	99	110	121	132	143	154	165	176	187	198	209	220
12	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
13	13	26	39	52	65	78	91	104	117	130	143	156	169	182	195	208	221	234	247	260
14	14	28	42	56	70	84	98	112	126	140	154	168	182	196	210	224	238	252	266	280
15	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300
16	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240	256	272	288	304	320
17	17	34	51	68	85	102	119	136	153	170	187	204	221	238	255	272	289	306	323	340
18	18	36	54	72	90	108	126	144	162	180	198	216	234	252	270	288	306	324	342	360
19	19	38	57	76	95	114	133	152	171	190	209	228	247	266	285	304	323	342	361	380
20	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400

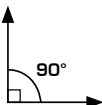
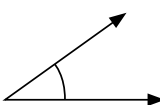
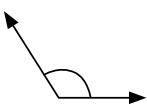



MATHEMATICS *area & volume*

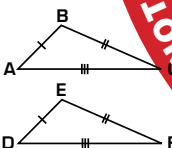
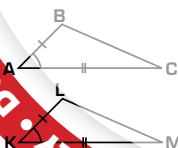
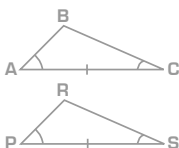
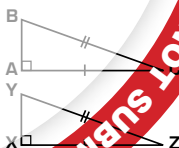
<p>PARALLELOGRAM</p>  <p>Area of ABCD = bh</p>	<p>RECTANGLE</p>  <p>Perimeter = $2(l + h)$ Area = lh</p>	<p>RIGHT TRIANGLE</p>  <p>Area = $ab/2$ $c^2 = a^2 + b^2$ (Pythagorean Theorem)</p>	
<p>ISOSCELES TRIANGLE</p>  <p>Area = $bh/2$</p>	<p>CIRCLE</p>  <p>Circumference of a circle = $2\pi r$ Area of a circle = πr^2</p>	<p>RECTANGULAR PRISM</p>  <p>Surface area of a prism = $2(lw + lh + wh)$ Volume of a prism = $l \times w \times h$</p>	
<p>SPHERE</p>  <p>Surface area of a sphere = $4\pi r^2$ Volume of a sphere = $4\pi r^3/3$</p>	<p>CYLINDER</p>  <p>Surface area of a cylinder = $2\pi rh + 2\pi r^2$ Volume of a cylinder = $\pi r^2 h$</p>	<p>CONE</p>  <p>Surface area of a cone = $\pi rl + \pi r^2$ (l = slant height) Volume of a cone = $\frac{1}{3}\pi r^2 h$</p>	<p>PYRAMID</p>  <p>Surface area of a pyramid = $B + \frac{1}{2}Bl$ (B = area of base, l = slant height) Volume of a pyramid = $Bh/3$ (B = area of base)</p>
<p>CIRCLE THEOREMS</p>  <p>$\angle x = 90^\circ$ (PQ is the diameter)</p>	 <p>C is the center of the circle</p>	 <p>$\angle a = \angle b$ (Both angles intercept arc AB)</p>	

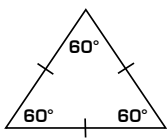
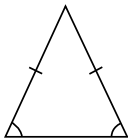
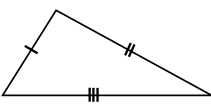


MATHEMATICS *geometric angles & congruence cases*

GEOMETRIC ANGLES			
 <p>A right angle is exactly 90°</p>	 <p>An acute angle is less than 90°</p>	 <p>An obtuse angle is greater than 90°</p>	 <p>A straight angle is exactly 180°</p>

 <p>Complementary angles add up to 90°</p>	 <p>Supplementary angles add up to 180°</p>	 <p>One complete angle of rotation is 360°</p>
---	--	---

GEOMETRIC CONGRUENCE CASES			
S.S.S. POSTULATE	S.A.S. POSTULATE	A.S.A. POSTULATE	H.S. POSTULATE (RIGHT Δ'S ONLY)
 <p>Side-Side-Side $\triangle ABC \cong \triangle DEF$</p>	 <p>Side-Angle-Side $\triangle ABC \cong \triangle KLM$</p>	 <p>Angle-Side-Angle $\triangle ABC \cong \triangle PRS$</p>	 <p>Hypotenuse-side $\triangle ABC \cong \triangle XYZ$</p>

EQUILATERAL TRIANGLE	ISOSCELES TRIANGLE	SCALENE TRIANGLE
 <p>3 Sides of Equal Length 3 Angles of 60° Each</p>	 <p>2 Sides of Equal Length 2 Base Angles are Equal</p>	 <p>3 Unequal Sides 3 Unequal Angles</p>



MATHEMATICS *trigonometry*

TRIGONOMETRIC RATIOS

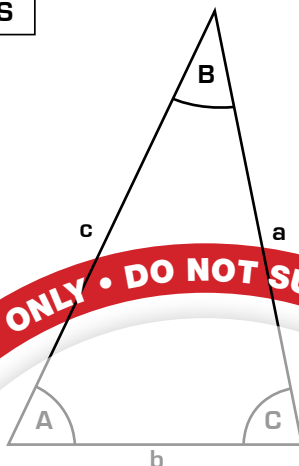
$$\begin{aligned}\sin(A+B) &= \sin A \cos B + \cos A \sin B \\ \sin(A-B) &= \sin A \cos B - \cos A \sin B \\ \cos(A+B) &= \cos A \cos B - \sin A \sin B \\ \cos(A-B) &= \cos A \cos B + \sin A \sin B\end{aligned}$$

$$\tan(A+B) = \frac{\tan A + \tan B}{1 - \tan A \tan B}$$

$$\tan(A-B) = \frac{\tan A - \tan B}{1 + \tan A \tan B}$$

$$\tan \theta = \frac{\sin \theta}{\cos \theta}$$

$$\begin{aligned}\sin^2 \theta + \cos^2 \theta &= 1 \\ \cos^2 \theta - \sin^2 \theta &= \cos 2\theta \\ \tan^2 \theta + 1 &= \sec^2 \theta \\ \cot^2 \theta + 1 &= \csc^2 \theta\end{aligned}$$



TRIGONOMETRIC RATIOS

Law of Sines

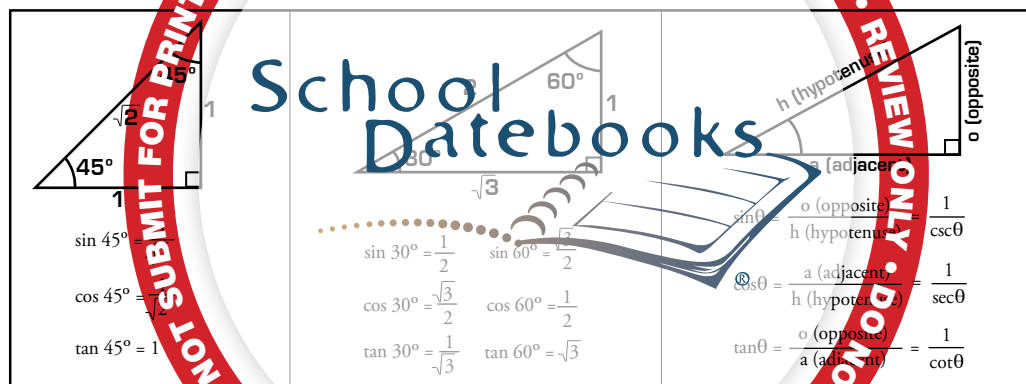
$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

Law of Cosines

$$\begin{aligned}a^2 &= b^2 + c^2 - 2bc(\cos A) \\ b^2 &= a^2 + c^2 - 2ac(\cos B) \\ c^2 &= a^2 + b^2 - 2ab(\cos C)\end{aligned}$$

Law of Tangents

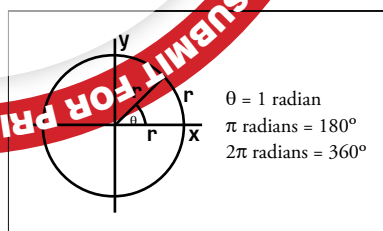
$$\begin{aligned}\frac{a}{b} &= \frac{\tan \frac{1}{2}(A+B)}{\tan \frac{1}{2}(A-B)} \\ \frac{b-c}{b+c} &= \frac{\tan \frac{1}{2}(B-C)}{\tan \frac{1}{2}(B+C)} \\ \frac{c-a}{c+a} &= \frac{\tan \frac{1}{2}(C-A)}{\tan \frac{1}{2}(C+A)}\end{aligned}$$



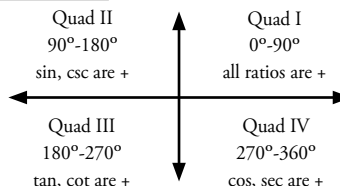
VALUES OF TRIGONOMETRIC RATIOS

θ	0	$\pi/2$	π	$3\pi/2$	2π
$\sin \theta$	0	1	0	-1	0
$\cos \theta$	1	0	-1	0	1
$\tan \theta$ (\sin/\cos)	0	∞	0	$-\infty$	0
$\sec \theta$ ($1/\cos$)	1	∞	-1	∞	1
$\csc \theta$ ($1/\sin$)	∞	1	∞	-1	∞
$\cot \theta$ ($1/\tan$)	∞	0	$-\infty$	0	∞

note: ∞ denotes undefined or infinite



QUADRANTS





CIVICS *Bill of Rights*

AMENDMENT I

Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the government for a redress of grievances.

AMENDMENT II

A well regulated militia, being necessary to the security of a free state, the right of the people to keep and bear arms, shall not be infringed.

AMENDMENT III

No soldier shall in time of peace be quartered in any house, without the consent of the owner, nor in time of war, but in a manner to be prescribed by law.

AMENDMENT IV

The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no warrants shall issue, but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

AMENDMENT V

No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a grand jury, except in cases arising in the land or naval forces, or in the militia, when in actual service in time of war or public danger; nor shall any person be subject for the same offense to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.

AMENDMENT VI

In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the state and district wherein the crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favor, and to have the assistance of counsel for his defense.

AMENDMENT VII

In suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved, and no fact tried by a jury, shall be otherwise re-examined in any court of the United States, than according to the rules of the common law.

AMENDMENT VIII

Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.

AMENDMENT IX

The enumeration in the Constitution, of certain rights, shall not be construed to deny or disparage others retained by the people.

AMENDMENT X

The powers not delegated to the United States by the Constitution, nor prohibited by it to the states, are reserved to the states respectively, or to the people.

School Datebooks



{AL}	Alabama-----	Montgomery	{MT}	Montana-----	Helena
{AK}	Alaska-----	Juneau	{NE}	Nebraska-----	Lincoln
{AZ}	Arizona-----	Phoenix	{NV}	Nevada-----	Carson City
{AR}	Arkansas-----	Little Rock	{NH}	New Hampshire-----	Concord
{CA}	California-----	Sacramento	{NJ}	New Jersey-----	Trenton
{CO}	Colorado-----	Denver	{NM}	New Mexico-----	Santa Fe
{CT}	Connecticut-----	Hartford	{NY}	New York-----	Albany
{DE}	Delaware-----	Dover	{NC}	North Carolina-----	Raleigh
{FL}	Florida-----	Tallahassee	{ND}	North Dakota-----	Bismarck
{GA}	Georgia-----	Atlanta	{OH}	Ohio-----	Columbus
{HI}	Hawaii-----	Honolulu	{OK}	Oklahoma-----	Oklahoma City
{ID}	Idaho-----	Boise	{OR}	Oregon-----	Salem
{IL}	Illinois-----	Springfield	{PA}	Pennsylvania-----	Harrisburg
{IN}	Indiana-----	Indianapolis	{RI}	Rhode Island-----	Providence
{IA}	Iowa-----	Des Moines	{SC}	South Carolina-----	Columbia
{KS}	Kansas-----	Topeka	{SD}	South Dakota-----	Pierre
{KY}	Kentucky-----	Frankfort	{TN}	Tennessee-----	Nashville
{LA}	Louisiana-----	Baton Rouge	{TX}	Texas-----	Austin
{ME}	Maine-----	Augusta	{UT}	Utah-----	Salt Lake City
{MD}	Maryland-----	Annapolis	{VT}	Vermont-----	Montpelier
{MA}	Massachusetts-----	Boston	{VA}	Virginia-----	Richmond
{MI}	Michigan-----	Lansing	{WA}	Washington-----	Olympia
{MN}	Minnesota-----	St. Paul	{WV}	West Virginia-----	Charleston
{MS}	Mississippi-----	Jackson	{WI}	Wisconsin-----	Madison
{MO}	Missouri-----	Jefferson City	{WY}	Wyoming-----	Cheyenne



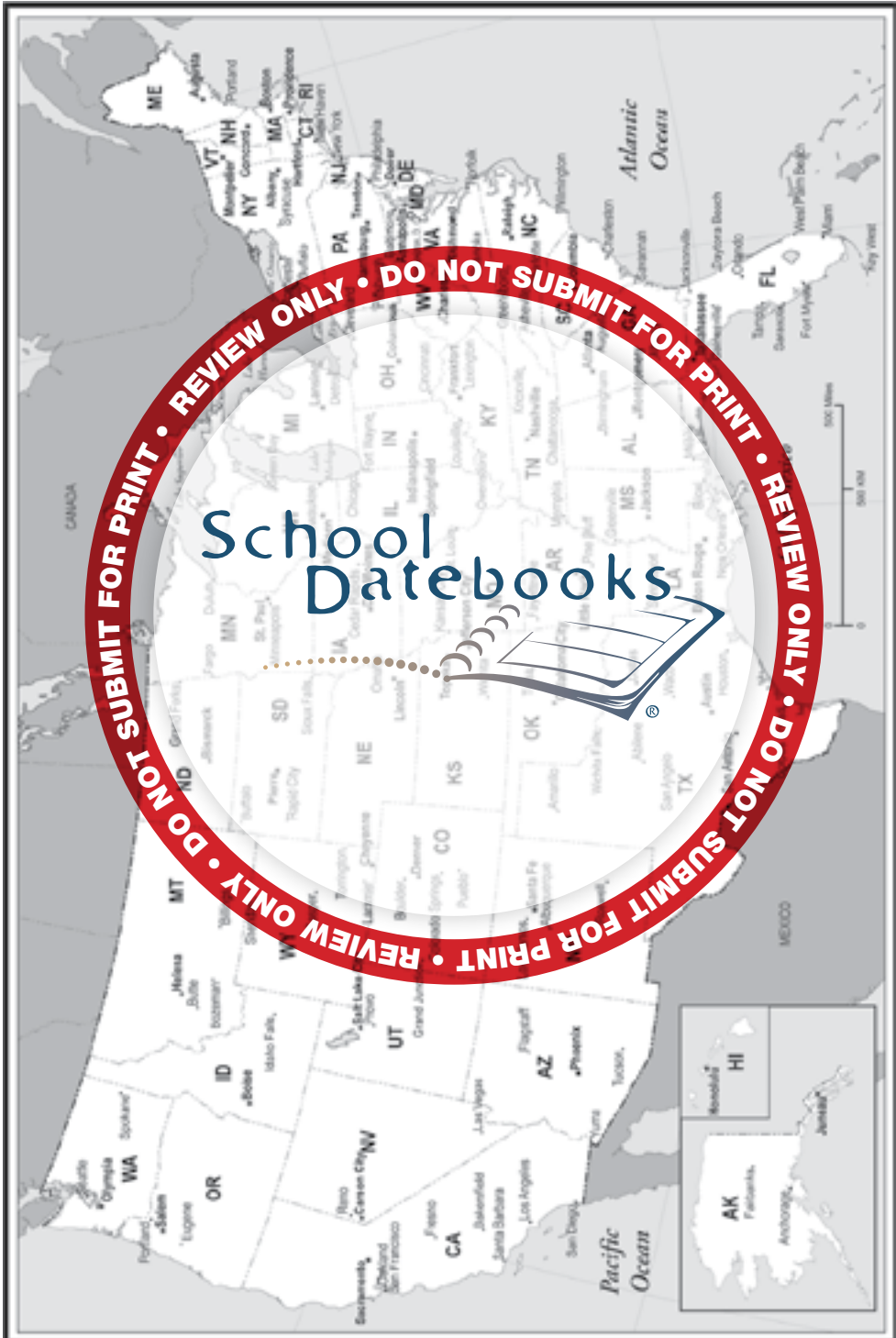


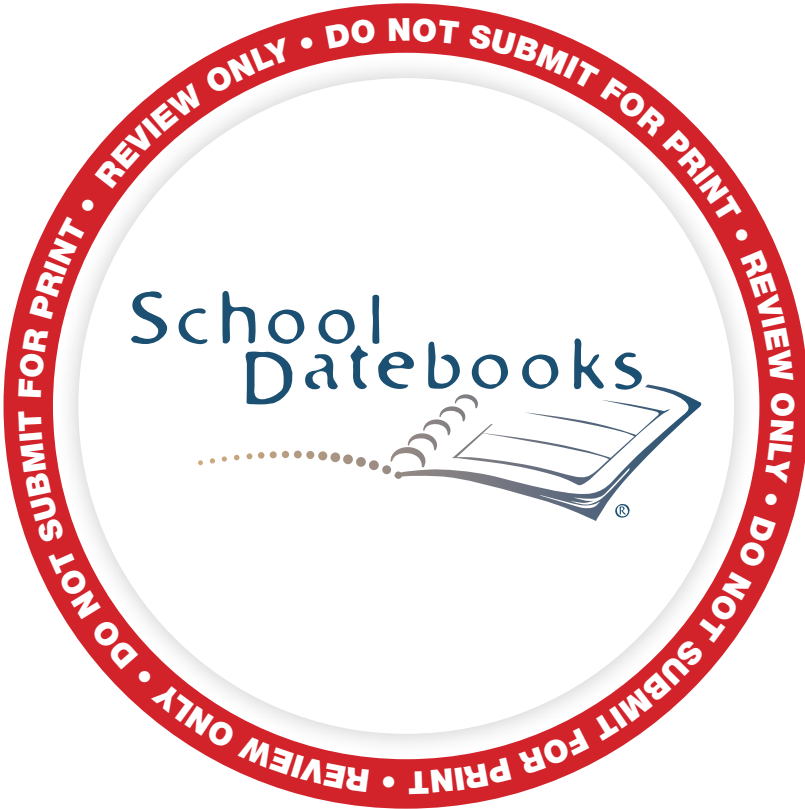
CIVICS *United States presidents*

No.	President	Party	Native State	Dates of term(s)	Vice President
{1}	George Washington	Unaffiliated	Virginia [†]	April 30, 1789-March 3, 1797	John Adams
{2}	John Adams	Fed.	Massachusetts [†]	March 4, 1797-March 3, 1801	Thomas Jefferson
{3}	Thomas Jefferson	Dem.-Rep.	Virginia [†]	March 4, 1801-March 3, 1805	Aaron Burr
{4}	James Madison	Dem.-Rep.	Virginia [†]	March 4, 1805-March 3, 1809	George Clinton
	James Madison			March 4, 1809-March 3, 1813	George Clinton*
	James Monroe	Dem.-Rep.	Virginia [†]	March 4, 1813-March 3, 1817	Elbridge Gerry*
{5}	John Quincy Adams	Dem.-Rep.	Massachusetts [†]	March 4, 1817-March 3, 1825	Daniel D. Tompkins
{6}	Andrew Jackson	Dem.	Carolinas [†]	March 4, 1825-March 3, 1829	John C. Calhoun
{7}	Andrew Jackson			March 4, 1829-March 3, 1833	John C. Calhoun*
	Martin Van Buren	Dem.	New York	March 4, 1833-March 3, 1837	Martin Van Buren
{8}	William Henry Harrison*	Whig	Virginia [†]	March 4, 1837-March 3, 1841	Richard M. Johnson
{9}	John Tyler	Whig	Virginia	April 6, 1841-March 3, 1845	John Tyler
{10}	James K. Polk	Dem.	North Carolina	March 4, 1845-March 3, 1849	George M. Dallas
{11}	Zachary Taylor*	Whig	Virginia	July 4, 1849-July 9, 1850	Millard Fillmore
{12}	Millard Fillmore	Whig	New York	July 9, 1850-March 3, 1853	
{13}	Franklin Pierce	Dem.	New Hampshire	March 4, 1853-March 3, 1857	William R. King*
{14}	James Buchanan	Dem.	Pennsylvania	March 4, 1857-March 3, 1861	John C. Breckinridge
{15}	Abraham Lincoln	Rep.	Kentucky	March 4, 1861-March 3, 1865	Hannibal Hamlin
{16}	Andrew Johnson	Rep.	Tennessee	March 4, 1865-April 15, 1865	Andrew Johnson
	Ulysses S. Grant	Rep.	Ohio	April 15, 1865-March 3, 1869	Schuyler Colfax
{17}	Ulysses S. Grant			March 4, 1869-March 3, 1873	Henry Wilson*
	Rutherford B. Hayes	Rep.	Ohio	March 4, 1873-March 3, 1877	William A. Wheeler
{19}	James A. Garfield	Rep.	Ohio	March 4, 1877-March 3, 1881	Chester A. Arthur
{20}	Chester A. Arthur	Rep.	Vermont	March 4, 1881-Sept. 19, 1881	
{21}	Grover Cleveland	Dem.	New Jersey	Sept. 19, 1881-March 3, 1885	Thomas A. Hendricks*
{22}	Benjamin Harrison	Rep.	Ohio	March 4, 1885-March 3, 1889	Levi P. Morton
{23}	Grover Cleveland	Dem.	New Jersey	March 4, 1889-March 3, 1893	Adlai E. Stevenson
{24}	William McKinley	Rep.	Ohio	March 4, 1893-March 3, 1897	Garret A. Hobart
{25}	William McKinley*			March 4, 1897-March 3, 1901	Theodore Roosevelt
	Theodore Roosevelt	Rep.	New York	Sept. 14, 1901-March 3, 1905	
{26}	Theodore Roosevelt			March 4, 1905-March 3, 1909	Charles W. Fairbanks
	William Taft	Rep.	Ohio	March 4, 1909-March 3, 1913	James S. Sherman
{27}	Woodrow Wilson	Dem.	Virginia	March 4, 1913-March 3, 1917	Thomas R. Marshall
	Woodrow Wilson			March 4, 1917-March 3, 1921	
{29}	Warren Harding*	Rep.	Ohio	March 4, 1921-August 2, 1923	Calvin Coolidge
{30}	Calvin Coolidge	Rep.	Vermont	August 3, 1923-March 3, 1925	
	Herbert Hoover	Rep.	Iowa	March 4, 1925-March 3, 1929	Charles G. Dawes
{31}	Franklin D. Roosevelt	Dem.	New York	March 4, 1929-March 3, 1933	Charles Curtis
{32}	Franklin D. Roosevelt			March 4, 1933-Jan. 20, 1945	John N. Garner
	Franklin D. Roosevelt			Jan. 20, 1941-Jan. 20, 1945	
	Franklin D. Roosevelt*			Jan. 20, 1945-April 12, 1945	Henry A. Wallace
{33}	Harry S. Truman	Dem.	Missouri	April 12, 1945-Jan. 20, 1949	Harry S. Truman
	Dwight D. Eisenhower	Rep.	Texas	Jan. 20, 1949-Jan. 20, 1953	Alben W. Barkley
{34}	Dwight D. Eisenhower			Jan. 20, 1953-Jan. 20, 1957	Richard M. Nixon
	John F. Kennedy*	Dem.	Massachusetts	Jan. 20, 1957-Jan. 20, 1961	
{35}	Lyndon B. Johnson	Dem.	Texas	Jan. 20, 1961-Nov. 22, 1963	Lyndon B. Johnson
{36}	Lyndon B. Johnson			Nov. 22, 1963-Jan. 20, 1965	
	Richard M. Nixon	Rep.	California	Jan. 20, 1965-Jan. 20, 1969	Hubert H. Humphrey
{37}	Richard M. Nixon*			Jan. 20, 1969-Jan. 20, 1973	Spencer F. Agnew*
	Gerald R. Ford	Rep.	Nebraska	Jan. 20, 1973-Aug. 9, 1974	Gerald R. Ford*
{38}	James E. Carter, Jr.	Dem.	Georgia	Aug. 9, 1974-Jan. 20, 1977	Nelson Rockefeller
{39}	Ronald Reagan	Rep.	Illinois	Jan. 20, 1977-Jan. 20, 1981	Walter Mondale
{40}	Ronald Reagan			Jan. 20, 1981-Jan. 20, 1985	George H. W. Bush
	George H. W. Bush	Rep.	Massachusetts	Jan. 20, 1985-Jan. 20, 1989	
{41}	William J. Clinton	Dem.	Arkansas	Jan. 20, 1989-Jan. 20, 1993	Dan Quayle
{42}	William J. Clinton			Jan. 20, 1993-Jan. 20, 1997	Albert Gore, Jr.
	George W. Bush	Rep.	Connecticut	Jan. 20, 1997-Jan. 20, 2001	
{43}	George W. Bush			Jan. 20, 2001-Jan. 20, 2005	Richard B. Cheney
	Barack H. Obama	Dem.	Hawaii	Jan. 20, 2005-Jan. 20, 2009	
{44}	Barack H. Obama			Jan. 20, 2009-Jan. 20, 2013	
	Donald Trump	Rep.	New York	Jan. 20, 2013-Jan. 20, 2017	Joseph R. Biden, Jr.
{45}	Joseph R. Biden, Jr.	Dem.	Delaware	Jan. 20, 2017-Jan. 20, 2021	Mike Pence
{46}				Jan. 20, 2021-	Kamala Harris

(*did not finish term, †born as subjects of Great Britain before United States was established)

ORDER OF PRESIDENTIAL SUCCESSION			
{1} The Vice President	{6} Secretary of Defense	{12} Secretary of Health and Human Services	{16} Secretary of Education
{2} Speaker of the House	{7} Attorney General		{17} Secretary of Veterans Affairs
{3} President pro tempore of the Senate	{8} Secretary of the Interior	{13} Secretary of Housing and Urban Development	{18} Secretary of Homeland Security
{4} Secretary of State	{9} Secretary of Agriculture	{14} Secretary of Transportation	
{5} Secretary of the Treasury	{10} Secretary of Commerce	{15} Secretary of Energy	
	{11} Secretary of Labor		









HEALTHY LIVING *dietary guidelines*

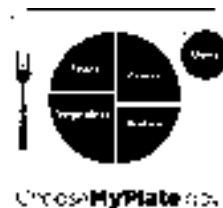
DIETARY GUIDELINES

RECOMMENDATIONS FOR DAILY FOOD CHOICES

A balanced diet of nutrient-rich foods is a key component of overall health. Follow the food group recommendations to help you eat better every day. Each of these food groups provides some, but not all, of the nutrients you need.

A healthy diet is one that emphasizes fruits, vegetables, whole grains, and fat-free or low-fat milk products; includes lean meats, poultry, fish, beans, eggs, and nuts; and is low in saturated fats, trans fats, cholesterol, salt (sodium), and added sugars.

Daily recommendations vary depending on age, weight, calorie intake, and exercise patterns. The United States Department of Agriculture (USDA) has developed a website, ChooseMyPlate.gov, to help you figure out the foods and portions that are right for you.



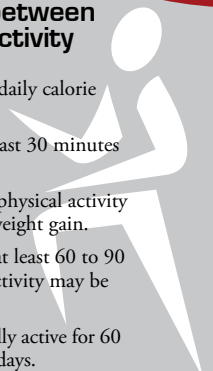
GRAINS	VEGETABLES	FRUITS	DAIRY	PROTEIN
Make half your grains whole	Vary your veggies	Focus on fruits	Get your calcium-rich foods	Go lean with protein
Eat grains, especially whole grains, like brown rice, oatmeal, or popcorn.	Eat more dark green veggies like broccoli or spinach.	Eat a variety of fruit.	Go low-fat or fat-free when you choose milk, yogurt, and other milk products.	Choose low-fat or lean meats and poultry.
Other grain choices include bread, crackers, cereal, or pasta.	Eat more orange vegetables like carrots and sweet potatoes.	Choose fresh, frozen, canned, or dried fruit.	Try to get to consume milk, choose lactose-free products or other calcium sources such as fortified foods and beverages.	Bake, broil it, or grill it.
	Eat more dry beans and peas like pinto beans, kidney beans, and lentils.	Choose easy-to-eat fruit juices.		Vary your protein routine—choose more fish, beans, peas, eggs, and seeds.
	Limit starchy vegetables.			

Your food and physical activity choices each day affect your health — how you feel today, tomorrow, and in the future.

To find the foods and portions that are right for you, visit ChooseMyPlate.gov.

Find your balance between food and physical activity

- Be sure to stay within your daily calorie needs.
- Be physically active for at least 30 minutes most days of the week.
- About 60 minutes a day of physical activity may be needed to prevent weight gain.
- For sustaining weight loss, at least 60 to 90 minutes a day of physical activity may be required.
- Teenagers should be physically active for 60 minutes every day, on most days.



Know the limits on fats, sugars, and salt (sodium)

- Make most of your fat sources from fish, nuts, and vegetable oils.
- Limit solid fats like butter, margarine, shortening and lard, as well as foods that contain these.
- Check the Nutrition Facts label to keep saturated fats, *trans* fats, and sodium low.
- Choose food and beverages low in added sugars. Added sugars contribute calories with few, if any, nutrients.





HEALTHY LIVING *hotlines & helplines*








GENERAL CRISIS		
7 Cups of Tea	Online listeners	www.7cups.com
Boys Town Hotline (24 hrs.)	800-448-3000	www.boystown.org
Crisis Call Center (National Suicide Prevention Lifeline) (24 hrs.)	800-273-8255	www.crisiscenter.org
I'm Alive (Online Crisis Network)	Online chat	www.imalive.org
Lifeline Crisis Chat (National Suicide Prevention Lifeline) (24 hrs.)	Online chat	suicidepreventionlifeline.org
National Center for Missing and Exploited Children (24 hrs.)	800-843-5678	www.missingkids.com
National Runaway Safeline (24 hrs.)	800-RUNAWAY	www.1800runaway.org
Teen Line	800-852-8336	www.teenlineonline.org
Youth America Hotline Your Life Counts	877-454-4544	www.yourlifecounts.org
ALCOHOL/SUBSTANCE ABUSE		
Al-Anon/Alateen (For Families & Friends of Problem Drinkers)	888-4AL-ANON	www.al-anon.alateen.org
Alcoholics Anonymous	212-870-3400	www.aa.org
American Council on Alcoholism	800-527-5344	www.alcoahelp.org
Narcotics Anonymous	818-773-9999	www.na.org
National Institute on Alcohol Abuse and Alcoholism	niaaaweb-r@exchange.nih.gov	www.niaaa.nih.gov
ABUSE/HEALTH INFO		
American Heart Association	800-AHA-USA-1	www.heart.org
CDC National HIV/AIDS Contact Center	800-CDC-INFO	www.cdc.gov/hiv
CDC National STD Contact Center	800-CDC-INFO	www.cdc.gov/std
National Cancer Institute	800-4-CANCER	www.cancer.gov
Childhelp National Child Abuse Hotline (24 hrs.)	800-4-A-CHILD	www.childhelp.org
National Organization for Rare Disorders	800-999-6673	www.rarediseases.org
Office on Women's Health	800-994-9662	www.womenshealth.gov
American Association of Poison Control Centers (24 hrs.)	800-222-1222	www.aapcc.org
Rape, Abuse and Incest National Network (RAINN) (24 hrs.)	800-656-HOPE	www.rainn.org
Youth Violence Prevention	800-CDC-INFO	www.cdc.gov/yvprevention
MENTAL HEALTH		
Depression and Bipolar Support Alliance Helpline	800-826-3632	www.dbsalliance.org
Mental Health America	800-969-6642	www.mentalhealthamerica.net
National Alliance on Mental Illness Helpline	800-950-NAMI	www.nami.org
National Mental Health Consumers' Self-Help Helpline	selfhelpclearinghouse.com	www.mhselfhelp.org
National Eating Disorders Association Helpline	800-931-2237	www.nationaleatingdisorders.org
SAFE Alternatives (Self Abuse Finally Ends)	800-DONT-CUT	www.selfinjury.com
SEXUAL ORIENTATION/GENDER IDENTITY		
Lesbian, Gay, Bisexual, and Transgender National Youth Talkline	800-246-7743	www.glbthotline.org/talkline.html
LYRIC (Center for LGBTQQ Youth)	415-703-6150	www.lyric.org
The Trevor Project Lifeline (LGBTQ Ages 13-24) (24 hrs.)	866-488-7386	www.thetrevorproject.org

**ASKING FOR HELP IS A SIGN
OF STRENGTH, NOT WEAKNESS.**





HEALTHY LIVING *emergency action steps*

EMERGENCY ACTION STEPS			<i>Adult Life-Saving Steps</i> ⇒ IN THE PANIC OF AN EMERGENCY, YOU MAY BE FRIGHTENED OR CONFUSED ABOUT WHAT TO DO. STAY CALM, YOU CAN HELP. THE THREE "EMERGENCY ACTION STEPS" WILL HELP YOU ORGANIZE YOUR RESPONSE TO THE SITUATION.
<div>1</div> CHECK <ul style="list-style-type: none"> ⇒ Check the scene for safety. ⇒ Check the victim for consciousness, breathing, pulse, and bleeding. 	<div>2</div> CALL <ul style="list-style-type: none"> ⇒ Dial 9 1 1 or your local emergency number. ⇒ Be prepared to give the dispatcher the exact address or location of the emergency. 	<div>3</div> CARE <ul style="list-style-type: none"> ⇒ Care for the victim. 	
<p>Always care for life-threatening conditions first. If there are none:</p> <ul style="list-style-type: none"> ⇒ Watch for changes in the victim's breathing or consciousness. ⇒ Keep the victim from getting chilled or overheated. ⇒ Help the victim rest comfortably. ⇒ Reassure the victim. 			
<p>If victim is unable to speak, cough, or breathe – Give abdominal thrusts (if person is conscious)</p>  <p>Place fist <i>above the navel</i> and give quick, upward thrusts until <i>object obstructing their breathing is removed.</i></p>		<p>If victim is not breathing – Give rescue breathing</p>  <p>Tilt head back and lift chin.</p> <p>Pinch nose shut. Give one slow breath about every 5 seconds.</p>	
<p>If air won't go in – Give abdominal thrusts</p>  <p>Give up to 5 abdominal thrusts.</p>	 <p>Look for and <i>remove any object from mouth.</i></p>	 <p>Tilt head back and reattempt breaths. Repeat steps until breaths go in.</p>	
<p>If not breathing and no pulse – Give CPR</p>			
 <p>Find hand position on center of breastbone.</p>		 <p>Compress chest 30 times. Give 2 slow breaths. Repeat sets of compressions and breaths until ambulance arrives.</p>	

Courtesy of:  American Red Cross



HEALTHY LIVING 2022-2023 NCAA Banned Drugs List

It is the student-athlete's responsibility to check with the appropriate or designated athletics staff before using any substance.

The NCAA bans the following drug classes.

1. Stimulants.
2. Anabolic agents.
3. Alcohol and beta blockers (banned for rifle only).
4. Diuretics and masking agents.
5. Narcotics.
6. Cannabinoids.
7. Peptide hormones, growth factors, related substances, and mimetics.
8. Hormone and metabolic modulators.
9. Beta-2 agonists.

Note: Any substance chemically/pharmacologically related to any of the classes listed above is also banned. All drugs within the banned-drug class shall be considered to be banned regardless of whether they have been specifically identified. Examples of substances under each class can be found at ncaa.org/drugtesting. There is no complete list of banned substances.

Substances and methods subject to restrictions:

1. Blood and gene doping.
2. Local anesthetics (permitted under some conditions).
3. Manipulation of urine samples.
4. Tampering of urine samples.
5. Beta-2 agonists (permitted only by inhalation with prescription).

NCAA nutritional/dietary supplements:

Before using any nutritional/dietary supplement product, a student-athlete should review the product and its label with the appropriate athletics department and/or medical staff.

1. Many nutritional/dietary supplements are contaminated with banned substances not listed on the label.
2. Nutritional/dietary supplements, including vitamins and minerals, are not well-regulated and may cause a positive drug test.
3. Student-athletes have tested positive and lost their eligibility using nutritional/dietary supplements.
4. Any product containing a nutritional/dietary supplement ingredient taken at risk.

As part of its responsibility to provide education about banned substances, athletics department staff should consider providing information about supplement use and the importance of having nutritional/dietary products evaluated by a qualified, trained professional. The NCAA has identified Drug Free Sport AXIS™ (AXIS) as the service designated to facilitate student-athlete and institutional review of label ingredients in medications and nutritional/dietary supplements. Contact AXIS at 816-474-7321 or dfsaxis.com (password ncaa1, ncaa2 or ncaa3).

THESE ARE NOT COMPLETE LISTS OF BANNED SUBSTANCES. DO NOT RELY ON THIS LIST AS EXHAUSTIVE OR TO CONFIRM OR RULE OUT ANY LABEL INGREDIENT THAT MAY CONTAIN A POTENTIAL BANNED SUBSTANCE.

Many nutritional/dietary supplements are contaminated with banned substances not listed on the label. It is the student-athlete's responsibility to check with the appropriate or designated athletics and/or medical staff before using any substance.

Some examples of substances in each NCAA banned drug class:

Stimulants:

Amphetamine (Adderall), Caffeine (Guarana), Cocaine, Dimethylbutylamine (DMBA; AMP), Dimethylhexylamine (DMHA; Octodrine), Ephedrine, Heptaminol, Hordenine, Methamphetamine, Methylhexanamine (DMAA; Forthane), Methylphenidate (Ritalin), Mephedrone (bath salts), Modafinil, Octopamine, Phenethylamines (PEAs), Pseudoephedrine, Sympheprine (bitter orange).

Exceptions: Phenylephrine and Pseudoephedrine are not banned.

Anabolic agents:

Androstenedione, Boldenone, Clenbuterol, Clostebol, DHCMT (Oral Turinabol), DHEA (7-Keto), Drostanolone, Epitrenbolone, Etiocholanolone, Methandienone, Methasterone, Nandrolone (19-nortestosterone), Norandrostenedione, Oxandrolone, SARMS [Ligandrol (LGD-4033); Ostarine; RAD140; S-23], Stanozolol, Stenbolone, Testosterone, Trenbolone.

Alcohol and beta blockers (banned for rifle only):

Alcohol, Atenolol, Metoprolol, Nadolol, Pindolol, Propranolol, Timolol.

Diuretics and masking agents:

Bumetanide, Spironolactone (Canrenone), Chlorothiazide, Furosemide, Hydrochlorothiazide, Probenecid, Triamterene, Trichlormethiazide.

Exception: Finasteride is not banned.

Narcotics:

Buprenorphine, Dextromoramide, Diamorphine (heroin), Fentanyl, and its derivatives, Hydrocodone, Hydromorphone, Methadone, Morphine, Nicomorphine, Oxycodone, Oxymorphone, Pentazocine, Pethidine.

Cannabinoids:

Marijuana, Synthetic cannabinoids (Spice; K2; JWH-018; JWH-073), Tetrahydrocannabinol (THC; Delta-8).

Peptide hormones, growth factors, related substances and mimetics

Human Growth Hormone (HGH), Human Chorionic Gonadotropin (hCG), Erythropoietin (EPO), IGF-1 (colostrum; deer antler velvet), Ibutamoren (MK-677).

Exceptions: Insulin, Synthroid and Forteo are not banned.

Hormone and metabolic modulators (anti-estrogens):

Anti-Estrogen (Fulvestrant), Aromatase Inhibitors [Anastrozole (Arimidex); ATD (androstatrienedione); Formestane; Letrozole], PPAR-d [GW1516 (Cardarine); GW0742], SERMS [Clomiphene (Clomid); Raloxifene (Evista); Tamoxifen (Nolvadex)].

Beta-2 agonists:

Bambuterol, Formoterol, Higenamine, Norcoclaurine, Salbutamol, Salmeterol.

Any substance that is chemically/pharmacologically related to one of the above drug classes, even if it is not listed as an example, is also banned.

Information about ingredients in medications and nutritional/dietary supplements can be obtained by contacting AXIS at 816-474-7321 or dfsaxis.com (password ncaa1, ncaa2 or ncaa3).



TIPS FOR IMPROVING YOUR MEMORY

- {1} Keep notes, lists, and journals to jog your memory.
- {2} Decide what is most important to remember by looking for main ideas.
- {3} Classify information into categories. Some categories may be:
 - a. Time – summer, sun, swimming, hot
 - b. Place – shopping center, stores, restaurants
 - c. Similarities – shoes, sandals, boots
 - d. Differences – mountain, lake
 - e. Wholes to parts – bedroom, bed, pillow
 - f. Scientific groups – Flowers, carnation, rose
- {4} Look for patterns. Try to make a word out of the first letters of a list of things you are trying to remember. You also can make a sentence out of the first letters of the words you need to remember.
- {5} Associate new things you learn with what you already know.
- {6} Use rhythm or make up a rhyme.
- {7} Visualize the information in your mind.
 - a. See the picture clearly and vividly.
 - b. Exaggerate and enlarge things.
 - c. See it in three dimensions.
 - d. Put yourself into the picture.
 - e. Imagine an action taking place.
- {8} Link the information together to give it meaning.
- {9} Use the information whenever you can. Repetition is the key to memory.

TIPS FOR TAKING STANDARDIZED TESTS

- {1} *Concentrate.* Do not talk or distract others.
- {2} *Listen carefully to the directions.* Ask questions if they are not clear.
- {3} *Pace yourself.* Keep your eye on the time, but do not worry too much about not finishing.
- {4} *Work through all of the questions in order.* If you do not think you know an answer to a problem, skip it and come back to it when you have finished the test.
- {5} *Read all of the possible answers* for each question *before choosing an answer.*
- {6} *Eliminate any answers that are clearly wrong,* and choose from the others. Words like always and never often signal that an answer is false.
- {7} *If questions are based on a reading passage,* read the questions first and then the passage. Then go back and try to answer the questions. Scan through the passage one last time to make sure the answers are correct.
- {8} *When you finish the test, go back through and check your answers for careless mistakes.* Change answers only if you are sure they are wrong or you have a very strong feeling they are wrong.
- {9} *Do not be afraid to guess at a question.* If you have a hunch you know the answer, you probably do!
- {10} *Use all of the time allotted* to check and recheck your test.



SUCCESS SKILLS *listening & homework skills*

LISTENING SKILLS

Listening (unlike hearing, which is a physical process that does not require thinking) gives meaning to the sounds you hear. It helps you understand. Listening is an active process that requires concentration and practice. In learning, the teacher's responsibility is to present information; the student's responsibility is to be "available" for learning. Not listening means you will be unable to learn the material.

To help develop listening skills:

- *Approach the classroom ready to learn;* leave personal problems outside the classroom. Try to avoid distractions.
- *Even if you do not sit close to the teacher,* focus your attention directly on them.
- *Pay attention to the teacher's style* and how the lecture is organized.
- *Participate;* ask for clarification when you do not understand.
- *Take notes.*
- *Listen for key words,* names, events, and dates.
- *Don't make hasty judgments;* separate fact from opinion.
- *Connect what you hear* with what you already know.

HOMEWORK SKILLS

- *Keep track of your daily assignments* in this datebook so you will always know what you have to do.
- *Homework is an essential part of learning.* Even though you may not have written work to do, you can always review or reread assignments. The more you review information, the easier it is to remember and the longer you are able to retain it. Not doing your homework because you do not believe in homework is self-defeating behavior.
- *It is your responsibility to find out what you have missed when you are absent.* Take the initiative to ask a classmate or teacher what you need to make up. You need to also know when it needs to be turned in. If you are absent for several days, make arrangements to receive assignments while you are out.
- *Have a place to study that works for you* – one that is free from distractions. Be honest with yourself about using the TV or stereo during study time. Make sure you have everything you need before you begin to work.
- *Develop a schedule that you can follow.* Be realistic when planning study time. It is okay to study in short blocks of time. Marathon study sessions may be self-defeating.
- *Prioritize your homework* so that you begin with the most important assignment first: study for a test, then do the daily assignment, etc.
- *Study for 30-40 minutes at a time,* then take a 5-10 minute break. Estimate the amount of time it will take to do an assignment and plan your break time accordingly.

School
Datebooks



SUCCESS SKILLS *successful notetaking*

SUCCESSFUL NOTETAKING

- Taking notes reinforces what we hear in the classroom and requires active listening. Having accurate information makes your outside study and review time that much easier. Good notetaking requires practice.
- Be aware of each teacher's lecture style; learning how to adapt to each style takes patience. Take notes as you (attentively) listen to the lecture. Keep notes in an individual notebook for each class or in a loose-leaf binder that has a section for each class. Your teacher may have certain requirements.
- Date each day's notes, and keep them in chronological order. Some teachers provide outlines that tell you how a series of lectures will be organized. Other teachers will deliver their lectures and expect you to write the information in your notes. Most teachers will emphasize important points by stressing them or repeating them a few times. Make a note in the margin or highlight any information the teacher specifically identifies as important.
- Write notes in short phrases, leaving out unnecessary words. Use abbreviations. Write clearly so you will be able to understand your notes when you review them.
- If you make a mistake, a single line through the material is less time consuming than trying to erase the whole thing. This will save time and you won't miss any of the lecture. Don't copy your notes over to make them neat; write them neatly in the first place. Don't create opportunities to waste your time.
- Write notes in the right two-thirds of a notebook page. Keep the left one-third free for your follow-up questions or to highlight the really important points in the discussion.
- Listen for key ideas. Write them down in your own words. Don't try to write down every word that your teachers say. Some teachers will use the chalkboard, an overhead projector, or a PowerPoint presentation to outline their key ideas. Others will simply stress them in their discussion.
- Soon after class, while the information is still fresh in your mind, create questions directly related to your notes in the left column of the paper. Place these questions across from the information to which it pertains. Highlight or underline any key points, terms, events or people. Quiz yourself by covering the 2/3 side of your notes and try to answer the questions you developed without referring to your notes. If you need to refresh your memory, simply uncover the note section to find the answers to your questions. Short, quick reviews will help you remember and understand the information as well as prepare for tests.
- Review your notes daily. This reinforces the information and helps you make sure that you understand the material.
- Make sure your notes summarize, not duplicate, the material.
- Devise your own use of shorthand.
- Vary the size of titles and headings.
- Use a creative approach, not the standard outline form.
- Keep class lecture notes and study notes together.

School Datebooks





SUCCESS SKILLS *plan for success*

PLAN FOR SUCCESS

SUCCESSFUL PEOPLE DON'T BECOME SUCCESSFUL BY LUCK. THEIR SUCCESS IS THE RESULT OF SETTING GOALS AND WORKING TO ACHIEVE THOSE GOALS. IN OTHER WORDS, SUCCESSFUL PEOPLE PLAN TO SUCCEED. YOU, TOO, CAN PLAN TO SUCCEED. DON'T PROCRASTINATE. GOOD INTENTIONS WILL NOT HELP YOU SUCCEED. START PLANNING FOR SUCCESS TODAY!

{1} Organization – Getting organized is the first step to success.

- ➔ Remember that you are responsible for knowing about and completing your assignments and special projects.
- ➔ Use your datebook to write down your homework, extracurricular activities, community activities, and home responsibilities.
- ➔ Make sure you have all the materials you need when you go to class and when you do your homework.

{2} Time Management – Managing time wisely will help ensure that you have the opportunity to do both the things you need to do and the things you want to do.

- ➔ Plan a definite time to do your homework.
- ➔ Plan time for extracurricular and social activities, as well as home responsibilities.
- ➔ Commit yourself to your time plan, but be flexible. For example, if something happens that makes it impossible for you to do homework during the regularly scheduled time, plan an alternate time to do the homework.

{3} Set Priorities – If you have lots to do, it is important to set priorities.

- ➔ Rank each task in 1, 2, 3 order. Start with #1 – the most important task – and continue on down the list.
- ➔ When doing homework, start with the subject in which you need the most improvement.
- ➔ Check off finished tasks.
- ➔ If you frequently find that you cannot finish all the tasks on your list, you may need to prioritize your optional activities and eliminate some that are low on your priority list.

{4} Set Goals – Just wishing to get better grades or to excel in a sport accomplishes nothing. You need a plan of action to achieve your goals. Setting goals will result in better grades and higher self-esteem. Best of all, setting goals will make you feel in control of your life. Some hints for setting goals:

- ➔ Be specific. List specific goals for each academic subject. Also list goals for other school and home activities.
- ➔ Set time limits. Your goals can be broken down to occur in a month or on the next quiz or test) and long-term (within the semester or within the school year).
- ➔ Set realistic goals. For example, if math has always been difficult for you, don't aim for an "A" in Algebra at the beginning of the year. If you usually get a "C-" in math, you may want to begin by setting a short-term goal of "C+" or "B-." Reaching that first short-term goal will give you the confidence to raise your goal for the next test or the next grading period.
- ➔ Draw up a step-by-step plan of action for reaching each goal; then go for it!
- ➔ Write your goals down, and put them in several places (your locker, your datebook, your bulletin board) so you will see them several times a day.
- ➔ Share your goals with others – your parents, teachers, good friends, etc. They can give you encouragement.
- ➔ Keep at it! Be determined, and keep a positive attitude. Visualize yourself achieving your goals.
- ➔ Reward yourself when you reach a goal.



SUCCESS SKILLS *basic résumé writing*

BASIC RÉSUMÉ WRITING

The Functional Résumé Format	
<p><i>The functional format is useful for graduating high school or college students who do not have extensive job experience.</i></p> <p><i>This type of résumé emphasizes skills and accomplishments achieved in school activities, internships, and in life.</i></p> <p><i>These are the 5 basic parts:</i></p>	<p>{1} Header: your name, address, phone number, email address.</p> <p>{2} Job objective: a short statement describing how you can be of help to the employer and what you intend to do (e.g., sell, design, operate, manage).</p> <p>{3} Qualifications: a brief list or statement highlighting your background, your strengths and what you want your employer to know about you. This can be optional.</p> <p>{4} Skills/Achievements: a description of your abilities, accomplishments, and areas of experience. These can also be grouped under headings, such as <i>Office Skills</i>, <i>Technical Experience</i>, or <i>Planning/ Organization</i>.</p> <p>{5} Education: a list of all formal education, workshops, seminars, internships, school-related activities, and on-the-job training (if any). The most recent should come first.</p>

Remember:

- ⇒ Use only one or two typefaces in the design of your résumé.
- ⇒ Use short phrases instead of long sentences and paragraphs.
- ⇒ Line up all headings to keep your résumé looking clean and professional.
- ⇒ Use good quality paper; A neutral color, such as white or ivory, is recommended.
- ⇒ Do not include salary requirements.
- ⇒ Do not include personal information such as date of birth, height, weight, marital status, health, religion, or hobbies.
- ⇒ Do not use the word *résumé* at the top of the page.
- ⇒ Keep your résumé to one page.
- ⇒ Have a list of references (names, company names, phone numbers) ready to give if requested.

Use Action Words to Describe Skills			
accomplished	charted	evaluated	issued
activated	classified	executed	launched
administered	coordinated	formulated	learned
advanced	communicated	generated	managed
advised	completed	guided	organized
analyzed	computed	implemented	outlined
applied	critiqued	improved	refined
arranged	delegated	initiated	reorganized
assembled	designed	instituted	streamlined
attained	determined	instructed	trained
automated	developed	introduced	updated
budgeted	devised	invented	utilized
calculated	established		wrote



SUCCESS SKILLS *basic résumé writing*

SAMPLE RÉSUMÉ

Joe Anybody

Campus Address

44 Residence Hall Drive
Campus Town, OH 45808
(233) 987-1234
janybody@e-mail.com

Permanent Address

1234 Oak Street
Anytown, MD 21113
(410) 123-4567
<http://www.mywebsite.html>

OBJECTIVE

A web design position that allows me to utilize my computer, graphic and illustration skills and apply my knowledge of the online sales industry.

EDUCATION

State University, Campus Town, OH

School of Technology

B.S. in Computer Graphic Design

Visual Communication Design major

May 2015

Major GPA: 3.25/4.0

GPA: 3.6/4.0

EXPERIENCE

Design Assistant, internship

Wicked Web Design, Cincinnati, OH

- Created templates for multi-use applications
- Designed and updated client websites
- Reorganized digital file storing system

May-August 2015

Webmaster

Kappa Sigma Fraternity, Campus Town, OH

- Designed and maintained website
- Established internal e-mail server
- Collaborated on intercampus fraternity website

August 2015-present

TECHNICAL SKILLS

CSS, HTML, JavaScript, Photoshop, Illustrator, Microsoft Office

MEMBERSHIPS

- Kappa Sigma Fraternity
- Student Volunteer Outreach Summit
- Campus Town Big Brothers/Big Sisters

REFERENCES

Available upon request

School
Datebooks



THE SUCCESSFUL STUDENT'S —(BAG OF SKILLS)—

LAUDABLE LISTENING

- Concentrate on what the instructor says.
- Avoid distractions.
- Pay attention to the lecturer. Take good notes.
- Participate! Ask questions if you don't understand.
- Listen for key words, names, events, and dates.
- Don't assume. Judge. Separate fact from opinion.
- Connect what you hear to what you already know.

HEALTHY HOMEWORK SKILLS

- Use this datebook to track your daily assignments.
- If you're absent, have a friend or parent get your assignments.
- Develop a routine for completing your homework: Set aside a time; choose a place; have your supplies at hand; and turn off the TV or music.
- Study in blocks of time (if that works best for you).
- Begin with your most important assignments first.
- Take breaks periodically to refresh yourself and review what you've learned.

NOTABLE NOTETAKING

- Date your notes and organize them chronologically.
- Paraphrase and abbreviate, but make sure you understand your own shorthand.
- Use the right two-thirds of the page for notes and the left third for writing questions and highlighting key points.
- Review your notes immediately after the class session.
- Fill in any points you missed. Use titles, drawings, etc., to organize and highlight the material.

A MEMORABLE MEMORY

- Use a variety of avenues (listening, notetaking, reading, online resources, etc.) to improve your chances of retaining the material.
- Look for the main ideas, then find out how they all relate.
- Use mnemonic devices. For example, make a word out of the first letters of the items you are trying to remember. To remember the five Great Lakes, think of HOMES: Huron, Ontario, Michigan, Erie, and Superior.
- Make up rhymes using the information you want to remember.
- Visualize the information or make up a story using the different facts you must recall.
- Use and review the information as often as you can because repetition is the key to a good memory.



SUCCESS SKILLS *keeping a monthly budget*

Learning how to manage your money is an important step in becoming financially independent. It's never too early to start keeping a budget. Use this budget worksheet to determine your income and expenses. If you need to cut back on spending, little bits add up.

→ When dining out with friends, don't order a soda; drink water instead.

- Skip costly coffeehouses and brew your own at home.
- Save money on gas and parking by walking to class or carpooling with pals.
- Many communities offer paying recycling programs, so cash in those cans.
- Consider trimming "extras" that add up, such as streaming services or eating out.

Category	Monthly Budget	Monthly Actual	Semester Budget	Semester Actual	School Yr. Budget	School yr. Actual
INCOME						
From Jobs						
From Parents						
From Student Loans						
From Scholarship						
From Financial Aid						
Miscellaneous Income						
INCOME TOTAL						
EXPENSES						
Rent or Room and Board						
Utilities (Gas, Electric, Water)						
Cell phone						
Cable TV or Streaming Services						
Groceries						
Car Payment/Transportation						
Insurance						
Gasoline/Oil						
Entertainment						
Eating Out/Vending						
Tuition						
Books						
School Fees						
Computer Expense						
Miscellaneous Expense						
EXPENSES TOTAL						
NET INCOME (Income minus expenses)						

[illegible]



CHARACTER *defining character*

What's **CHARACTER** all about?

"Character is power." ~ BOOKER T. WASHINGTON

"What lies behind us and what lies before us are small matters compared to what lies within us." ~ RALPH WALDO EMERSON

As you wind your way through this world, you inevitably come to a fork in the road: You can either be *known for* your character – or be known *as* a character. To paraphrase a high school principal's advice to his graduating class.

Your character determines whether your friends, classmates, and family members see you as a leader, respect you as a role model, and ultimately, feel their interactions with you help them become better people.

But what values and personal attributes comprise character? To name just a few, character is defined by:

School Datebooks

CARING Caring and concern for others are at the heart of the Golden Rule – "Treat others as you want them to treat you."

HONESTY Be honest with yourself and with others in every interaction. Honesty and integrity are the core values that make respect, courage, and trustworthiness possible.

ACTIONS Your actions – not your intentions or words – are what define your character. Often, these become acts of courage, such as taking a stand against injustice, prejudice, cruelty, and other inhumane behaviors.

RESPONSIBILITY Your sense of responsibility is what compels you to do the right thing, follow through on your promises, and be accountable for your actions. Personal rights are only possible if they're accompanied by responsibility.

ACCEPTANCE Character demands that we accept others' differences and appreciate how diversity strengthens our society.

CITIZENSHIP People of strong moral character don't sit on the sidelines. Contribute your "fair share" – participate fully as a concerned student, volunteer, and voter.

TRUSTWORTHINESS Trust can't be granted; it can only be earned. Deliver on your promises. Act honestly at every turn.

EMPATHY When you empathize with others, you go beyond kindness and caring; you truly begin to see the world from someone else's perspective.

RESPECT Respect for yourself and for others is an integral component of character. Without respect, caring and empathy are empty expressions. Respect is what enables us to accept and appreciate others' differences.

[illegible][illegible]

CLASS SCHEDULE *first semester*



FIRST SEMESTER

Subject	Instructor	Office	Telephone

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
7:00						
8:00						
9:00						
10:00						
11:00						
12:00						
1:00						
2:00						
3:00						
4:00						
5:00						
6:00						
7:00						
8:00						
9:00						



SECOND SEMESTER

[illegible]

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
7:00						
8:00						
9:00						
10:00						
11:00						
12:00						
1:00						
2:00						
3:00						
4:00						
5:00						
6:00						
7:00						
8:00						
9:00						



CLASS SCHEDULE *first & second semester*

FIRST SEMESTER

[illegible]

SECOND SEMESTER

Period	Subject	Teacher	Room

REVIEW ONLY • DO NOT SUBMIT



CLASS SCHEDULE *trimesters*



FIRST TRIMESTER

Time	Subject	Instructor	Bldg/Rm

SECOND TRIMESTER

Time	Subject	Instructor	Bldg/Rm

THIRD TRIMESTER

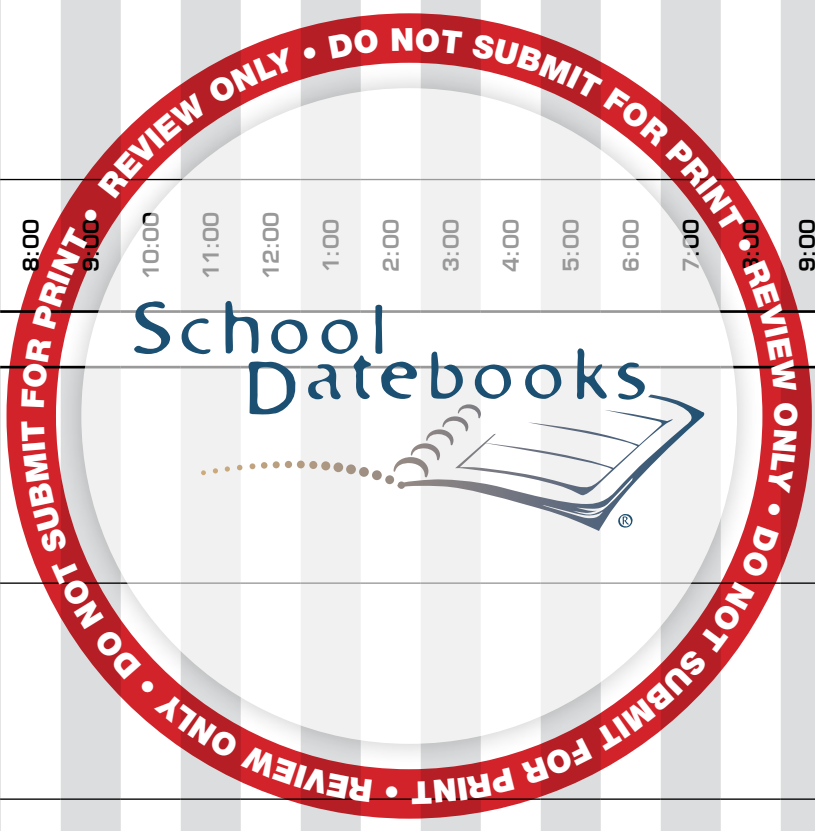
Time	Subject	Instructor	Bldg/Rm



CLASS SCHEDULE *block class schedule*



Time	Monday	Wednesday	Friday	Time	Tuesday	Thursday
7:00				7:00		
8:00				8:00		
9:00				9:00		
10:00				10:00		
11:00				11:00		
12:00				12:00		
1:00				1:00		
2:00				2:00		
3:00				3:00		
4:00				4:00		
5:00				5:00		
6:00				6:00		
7:00				7:00		
8:00				8:00		
9:00				9:00		



ADVANCE PLANNING



AUGUST 2025

S	M	T	W	T	F	S
						1
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

SEPTEMBER 2025

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

OCTOBER 2025

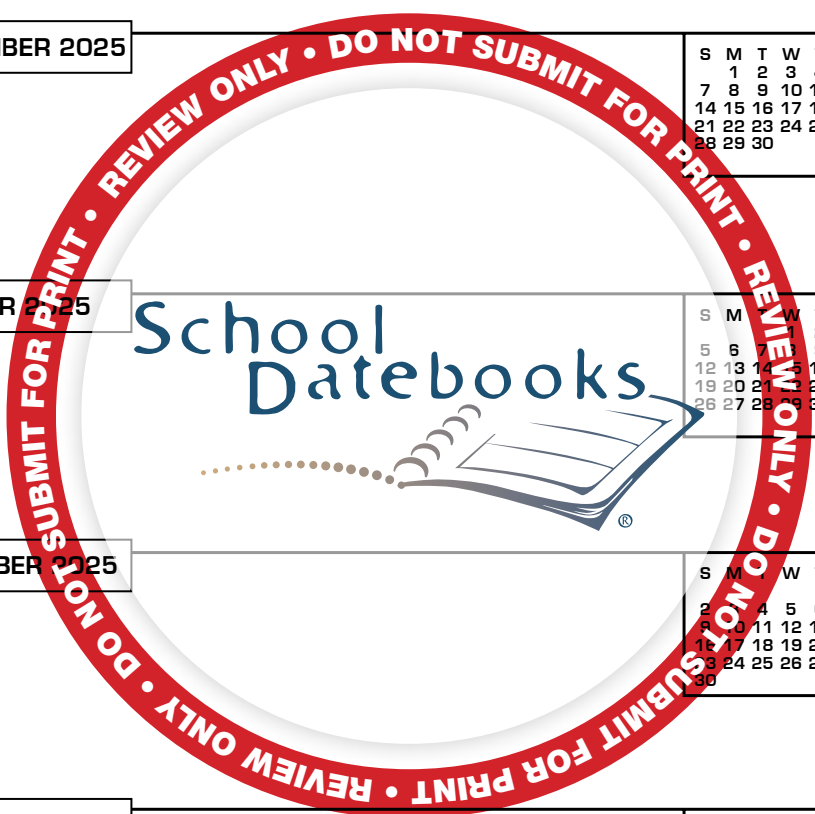
S	M	T	W	T	F	S
						1
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

NOVEMBER 2025

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

DECEMBER 2025

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			



CALENDAR YEARS

2024

January	S 7 14 21 28	M 8 15 22 29	T 9 16 23 30	W 10 17 24 31	T 11 18 25	F 12 19 26	S 13 20 27	February	S 4 11 18 25	M 5 12 19 26	T 6 13 20 27	W 7 14 21 28	T 8 15 22	F 9 16 23	S 10 17 24	March	S 3 10 17 24	M 4 11 18 25	T 5 12 19 26	W 6 13 20 27	T 7 14 21	F 8 15 22	S 9 16 23	April	S 14 21 28	M 15 22 29	T 16 23 30	W 17 24	T 18 25	F 19 26	S 20 27
May	S 12 19 26	M 5 12 19 26	T 6 13 20 27	W 7 14 21 28	T 8 15 22 29	F 9 16 23 30	S 10 17 24 31	June	S 2 9 16 23	M 3 10 17 24	T 4 11 18 25	W 5 12 19 26	T 6 13 20	F 7 14 21	S 8 15 22	July	S 7 14 21 28	M 8 15 22 29	T 9 16 23 30	W 10 17 24	T 11 18	F 12 19 26	S 13 20	August	S 11 18 25	M 12 19 26	T 13 20 27	W 14 21 28	T 15 22	F 16 23	S 17 24
September	S 8 15 22 29	M 9 16 23	T 10 17 24	W 11 18 25	T 12 19 26	F 13 20 27	S 14 21 28	October	S 1 8 15 22 29	M 2 9 16 23	T 3 10 17 24	W 4 11 18 25	T 5 12 19	F 6 13 20 27	S 7 14 21	November	S 10 17 24	M 11 18 25	T 12 19 26	W 13 20 27	T 14 21	F 15 22	S 16 23	December	S 15 22 29	M 16 23	T 17 24	W 18 25	T 19 26	F 20 27	S 21 28

2025

2026

REVIEW ONLY

January	S	M	T	W	T	F	S	February	S	M	T	W	T	F	S	March	S	M	T	W	T	F	S	April	S	M	T	W	T	F	S	
						1	2	3	1	2	3	4	5	6	7		1	2	3	4	5	6	7		1	2	3	4				
	4	5	6	7	8	9	10		11	12	13	14	15	16	17		8	9	10	11	12	13	14		5	6	7	8	9	10	11	
	11	12	13	14	15	16	17		18	19	20	21	22	23	24		15	16	17	18	19	20	21		12	13	14	15	16	17	18	
	18	19	20	21	22	23	24		25	26	27	28	29	30	31		22	23	24	25	26	27	28		19	20	21	22	23	24	25	
	25	26	27	28	29	30	31										29	30	31						26	27	28	29	30			
May	S	M	T	W	T	F	S	June	S	M	T	W	T	F	S	July	S	M	T	W	T	F	S	August	S	M	T	W	T	F	S	
						1	2		1	2	3	4	5	6							1	2	3	4						1		
	3	4	5	6	7	8	9		7	8	9	10	11	12	13		5	6	7	8	9	10	11		2	3	4	5	6	7	8	
	10	11	12	13	14	15	16		14	15	16	17	18	19	20		12	13	14	15	16	17	18		9	10	11	12	13	14	15	
	17	18	19	20	21	22	23		21	22	23	24	25	26	27		19	20	21	22	23	24	25		16	17	18	19	20	21	22	
	24	25	26	27	28	29	30		28	29	30						26	27	28	29	30	31			23	24	25	26	27	28	29	
	31																							30	31							
September	S	M	T	W	T	F	S	October	S	M	T	W	T	F	S	November	S	M	T	W	T	F	S	December	S	M	T	W	T	F	S	
					1	2	3	4						1	2	3	1	2	3	4	5	6	7					1	2	3	4	5
	6	7	8	9	10	11	12		4	5	6	7	8	9	10		8	9	10	11	12	13	14		6	7	8	9	10	11	12	
	13	14	15	16	17	18	19		11	12	13	14	15	16	17		15	16	17	18	19	20	21		13	14	15	16	17	18	19	
	20	21	22	23	24	25	26		18	19	20	21	22	23	24		22	23	24	25	26	27	28		20	21	22	23	24	25	26	
	27	28	29	30					25	26	27	28	29	30	31		29	30							27	28	29	30	31			



IMPORTANT DATES *United States*

	2024	2025	2026
<i>New Year's Day*</i>	Mon., Jan. 1	Wed., Jan. 1	Thurs., Jan 1
<i>Martin Luther King Jr. Day*</i>	Mon., Jan. 15	Mon., Jan. 20	Mon., Jan 19
<i>Groundhog Day</i>	Fri., Feb. 2	Sun., Feb. 2	Mon., Feb 2
<i>Lunar New Year</i>	Sat., Feb. 10	Wed., Jan. 29	Tues., Feb 17
<i>Lincoln's Birthday</i>	Mon., Feb. 12	Wed., Feb. 12	Thurs., Feb 12
<i>Valentine's Day</i>	Wed., Feb. 14	Fri., Feb. 14	Sat., Feb 14
<i>Presidents' Day*</i>	Mon., Feb. 19	Mon., Feb. 17	Mon., Feb 16
<i>Washington's Birthday</i>	Thurs., Feb. 22	Sat., Feb. 22	Sun., Feb 22
<i>Ash Wednesday</i>	Wed., Feb. 14	Wed., Mar. 5	Wed., Feb 18
<i>Daylight saving time begins</i>	Sun., Mar. 10	Sun., Mar. 9	Sun., Mar 8
<i>St. Patrick's Day</i>	Sun., Mar. 17	Mon., Mar. 17	Tues., Mar 17
<i>First day of spring</i>	Tues., Mar. 19	Thurs., Mar. 20	Fri., Mar 20
<i>April Fools' Day</i>	Mon., Apr. 1	Tues., Apr. 1	Wed., Apr 1
<i>Palm Sunday</i>	Sun., Mar. 24	Sun., Apr. 13	Sun., Mar 29
<i>Pasover begins at sundown</i>	Mon., Apr. 22	Sat., Apr. 12	Wed., Apr 1
<i>Good Friday</i>	Fri., Mar. 29	Fri., Apr. 18	Fri., Apr 3
<i>Easter</i>	Sun., Mar. 31	Sun., Apr. 20	Sun., Apr 5
<i>Earth Day</i>	Mon., Apr. 22	Tues., Apr. 22	Wed., Apr 22
<i>Cinco de Mayo</i>	Sun., May 5	Mon., May 5	Tue., May 5
<i>Mother's Day</i>	Sun., May 12	Sun., May 11	Sun., May 10
<i>Memorial Day</i>	Mon., May 27	Mon., May 26	Mon., May 25
<i>Flag Day</i>	Fri., Jun. 7	Sat., Jun. 14	Sun., Jun 14
<i>Father's Day</i>	Sun., June 16	Sun., June 15	Sun., Jun 14
<i>Juneteenth*</i>	Wed., June 19	Thurs., June 19	Fri., Jun 19
<i>First day of summer</i>	Thurs., June 20	Fri., June 20	Sun., Jun 21
<i>Independence Day*</i>	Thurs., July 4	Fri., July 4	Sat., Jul 4
<i>Labor Day*</i>	Mon., Sept. 2	Mon., Sept. 1	Mon., Sep 7
<i>Patriot Day</i>	Wed., Sept. 11	Thurs., Sept. 11	Fri., Sep 11
<i>Rosh Hashanah begins at sundown</i>	Wed., Oct. 2	Mon., Sept. 22	Fri., Sep 11
<i>First day of autumn</i>	Sun., Sept. 22	Mon., Sept. 22	Tues., Sep 22
<i>Yom Kippur begins at sundown</i>	Fri., Oct. 11	Wed., Oct. 1	Sun., Sep 20
<i>Columbus Day*</i>	Mon., Oct. 14	Mon., Oct. 13	Mon., Oct 12
<i>Halloween</i>	Thurs., Oct. 31	Fri., Oct. 31	Sat., Oct 31
<i>Standard time begins</i>	Sun., Nov. 3	Sun., Nov. 3	Sun., Nov 1
<i>Election Day</i>	Tues., Nov. 5	Tues., Nov. 4	Tues., Nov 3
<i>Veterans Day*</i>	Nov. 11	Sun., Nov. 11	Wed., Nov 11
<i>Thanksgiving*</i>	Thurs., Nov. 28	Thurs., Nov. 27	Thurs., Nov 26
<i>Hanukkah begins at sundown</i>	Wed., Dec. 25	Sun., Dec. 14	Fri., Dec 4
<i>First day of winter</i>	Sat., Dec. 21	Sun., Dec. 21	Mon., Dec 21
<i>Christmas*</i>	Wed., Dec. 25	Thurs., Dec. 25	Fri., Dec 25
<i>Kwanzaa begins</i>	Thurs., Dec. 26	Fri., Dec. 26	Sat., Dec 26

* Federal Holiday in the United States

NAME	TELEPHONE NO.	E-MAIL ADDRESS
Fire		
Police		
Rescue/Ambulance		
Doctor		
Hospital		

