



LIFE'S YOUR STAGE

**STEP
IT UP!**

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2024-2025

PLANNER FEATURES:

Room to record all of your weekly goals.

Convenient calendar on each weekly spread.

Thought-provoking character text for each week.



Lots of white space for writing!

Hall passes are included by every school day!

Expand your vocabulary and prepare for testing with our weekly vocabulary words!

THIS PLANNER BELONGS TO:

NAME:

PHONE:

EMAIL:

HOMEROOM:

Planners WITH A PURPOSE
by SUCCESS BY DESIGN, INC.

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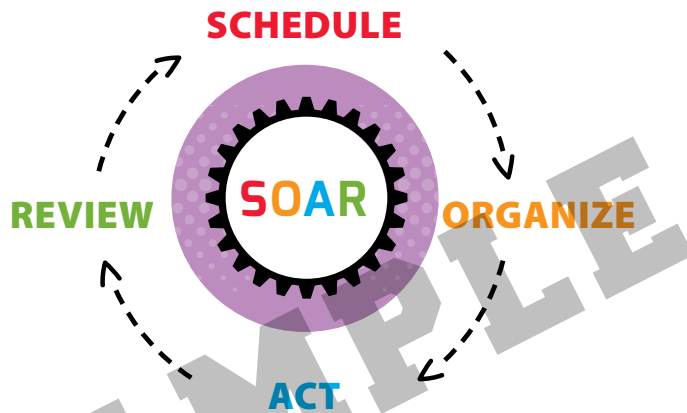
Please Recycle This Planner

SOAR INTO THE ACHIEVEMENT ZONE

Follow these 4 easy steps and achieve!

While learning the knowledge and skills for 21st Century success, you need to stay organized. Follow this easy 4-step plan to make sure you do all the work and meet all the commitments that are expected of you at school and after school.

Schedule, Organize, Act, Review



1) Schedule every commitment by writing it in this planner on the date it is assigned or the date you'll be completing it.

This includes homework, after school activities, social activities, family events, and all other tasks in which you participate or are expected to do.

2) Organize all resources needed to complete each commitment you have recorded.

Don't wait until the last minute. Make sure you have everything you need to fulfill your commitments whether it is ink

in your printer to print a report or cookies you promised to bring to an after school meeting.

3) Act. Do each commitment to the best of your ability.

It is easy to do less than your best, especially when you are busy, but you will be much more pleased with yourself if you know you did your best.

4) Review the work you have done and what you accomplished by completing all of your commitments.

Continually look for ways to improve!

INTEGRATING PRINT & DIGITAL TECHNOLOGIES

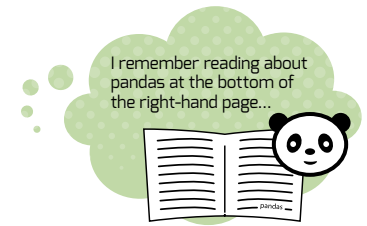
Our Brains are Amazing and Complex!

The way the brain learns from paper and printed material/books is different than how it learns from reading on screens such as phones and tablets.¹

Since books have text that is set in a stationary place, the brain can latch on to that physical space and remember it better. For example, sentences and paragraphs are set in size, shape and location. A book has set left and right pages that give 8 total physical corners that our minds can remember.¹

Screen Reading Most reading on a screen is scrolling and moving continuously so your brain doesn't have anything to latch on to and remember as easily!¹

Another reason your teacher may have you read or write with paper (and not review and type on screen) is to help your concentration and focus.³



It has been proven that students are most likely to skim, browse and jump around in an article on screen.¹ Most screen devices have many distractions—alerts and notifications, other programs, internet interests, music, etc.—all of which pull attention away from the reading.⁴

Sources:

- 1 Jabir, Ferris. "The Reading Brain in the Digital Age: The Science of Paper versus Screens." *Scientific American*, Scientific American, 11 Apr. 2013. <https://www.scientificamerican.com/article/reading-paper-screens/>.
- 2 Baron, Naomi S., et al. "Reading in a Digital Age." *Kappanonline.org*, 5 Dec. 2018. <https://kappanonline.org/reading-digital-age/>.
- 3 FYILiving. "Why Does Writing Make Us Smarter?" *HuffPost*, HuffPost, 7 Dec. 2017. https://www.huffpost.com/entry/why-does-writing-make-us_n_900638.
- 4 Rosenwald, Michael S. "Why Digital Natives Prefer Reading in Print. Yes, You Read That Right!" *The Washington Post*, WP Company, 22 Feb. 2015. https://www.washingtonpost.com/local/why-digital-natives-prefer-reading-in-print-yes-you-read-that-right/2015/02/22/8596ca86-b871-11e4-9423-fd0a1ec335c_story.html.

STUDENTS IN THE U.S. REPORT:²

85% multitask when reading **DIGITALLY**
only **26%** multitask when reading in **PRINT**

When asked what platform students most preferred for reading (print, tablet, e-reader, phone, or computer), **92%** said that they concentrated best when reading in... **PRINT!**

Integration Tips! However, using technology is important for well-rounded growth. Here are two easy steps on how you may integrate your paper planner with technology!

1) In your digital calendar set alerts for events that you will be attending—games, work, family activities, etc. Also, note the time you set aside to do your homework. When you are alerted to do your homework, then you can refer to your Success by Design Student Planner.

2) Your Student Planner may have preprinted subjects, or you may be able

to write in your specific subjects. In this paper planner you will have the space to write all the details and information you need to know in order to accomplish your assignments successfully and completely.

For example: Alert yourself digitally, "Do homework from 6–8 p.m.," and then in your planner have written, "Math, pages 76–77, numbers 1–10. Use the new formulas."

Stay Alert! Texting, checking emails, browsing the internet, messaging, and scrolling social media have become ingrained within our everyday lives. This can be a great way for people to communicate and stay connected online—whether they are within the same household, or across the globe! However, with this amazing ability comes a hefty responsibility. Being connected can be a mix of positive—and sometimes negative outcomes. **Learn how to balance online life safely!**

Constant updates on what friends and family are doing make it easy to compare our lives to others. Step away from time online when it's bringing you down. Turn notifications off to avoid constant updates.²

Phones, tablets, TVs, and computer screens give off blue light, which is similar to daylight. This confuses the body into a state of daytime alertness. Shut off your devices with plenty of time to unwind before bed, so you can get quality, uninterrupted sleep!³

Think before you post. **Once something is on the internet, it can be very difficult or impossible to remove completely.** Photos, videos, and words can be seen, shared, and saved by thousands of people, even if unintended.

While it's easy to stay in touch with your friends and family online, nothing beats in-person contact! Don't forget to set up times to hang out, talk, and do fun activities with your people—phones aside.

What effect does Social Media have on your life?

"A plurality of teens (45%) believe social media has neither a positive nor negative effect on people their age. Meanwhile, roughly three-in-ten teens (31%) say social media has had a mostly positive impact, while 24% describe its effect as mostly negative."¹

TEEN BELIEFS ON SOCIAL MEDIA EFFECTS:	POSITIVE	NEUTRAL	NEG.
	31%	45%	24%

Sources:

- Anderson, Monica, and Jingling Jiang. "Teens, Social Media & Technology 2018." Pew Research Center, 27 May 2021. <https://www.pewresearch.org/internet/2018/05/31/teens-social-media-technology-2018/>.
- "Social Media & Teen Mental Health." Wellness Every Day. <https://www.wellnesseveryday.org/mental-health/>.
- "How Screen Time May Cause Insomnia in Teens." Sleep Foundation, 5 Feb. 2021. <https://www.sleepfoundation.org/teens-and-sleep/screen-time-and-insomnia-for-teens>.
- "Quick Guide to Secure Passwords." Connect Safely, 28 Sept. 2021. <https://www.connectsafely.org/passwords/>.

PRIVACY AND SECURITY

Passwords: Keeping your passwords secure is important.

- ✓ don't use the same password for multiple accounts
- ✓ avoid sharing your passwords
- ✓ create strong passwords by using more characters

Password Tip Create a strong password by using numbers, symbols, and upper and lowercase letters. For example, create a phrase that you can remember, but is random to others, like Sharks24Blue!headphone\$.⁴

Privacy Settings: Social media apps, web browsers, etc. have various settings you can adjust to maintain security.

- ✓ make your profile private when possible
- ✓ turn current location sharing settings off
- ✓ adjust settings to manually approve photos you are tagged in

Safety: Things are not always the way they seem in an online world. Be vigilant!

- ✓ If you suspect somebody has hacked your account, change your password or disable the account.
- ✓ Review the newsfeeds for all social media friend requests *before* you accept a request.

PLAN FOR YOUR FUTURE

Get Ready... Imagine yourself in five years. What will you be doing? Where will you be living? Now try picturing yourself in 10, even 15 years! Can you see your future clearly? Whether you can see years into your future, or only a few months, now is the time to begin preparing for your life after high school! There are four main paths you can take after you graduate. Review the lists below to see where the best fit for you may be!

GET A JOB

This path is the most direct route to your "working future." Do you have a particular job in mind? Make sure that you're taking classes that best prepare you for the type of job you would like to obtain. Work with your guidance counselor to ensure that you are on the right track.

Types of Jobs: Store Clerk, Retail, Manual Labor, Manufacturing, Food Service, etc.

LEARN A TRADE

Learning a trade allows you to begin working in a field of interest, usually as an apprentice or an assistant, while you take classes at a vocational school to further your education. Earning your certification in a skilled trade will take approx. 2–4 years.

Skilled Trades: Electrician, Automotive Repair, Heating and Cooling Repair, Plumbing, Construction, and many more!

GO TO COLLEGE

Going to college requires a lot of early preparation and is perhaps the most costly of the four paths, but for the right person it can be a fabulous choice. The decision to go to college is usually followed by an interest in a career that requires an Associates (approx. 2 years), Bachelors (approx. 4 years), or even more advanced degrees (approx. 6+ years) in order to be qualified.

Degrees: Different colleges offer different degrees. Do some research and share your goals with your guidance counselor.

JOIN THE MILITARY

If fast-paced, on-the-job-training is more your speed, then perhaps joining a branch of the military is for you. Military jobs can range from service positions to technical and computer careers, with many different options in between—and great potential travel opportunities.

Branches: Army, Navy, Air Force, Marines, and Coast Guard.

What path sounds the most interesting to you? Write a list of your skills, interests, and goals. Analyze your list and compare it to the four different career paths. Can you fit the majority of your list under a particular path?

YOU'VE CHOSEN A CAREER PATH... Now what? No matter which career path you've selected, there's some prep work that needs to be done. What do you need to do now in order to best prepare for your future? Could you do some research into your career interests? Should you begin working on resumes, cover letters, essays, and entrance exams? Are there ACT and SAT tests that you should be taking? Seek guidance from your family, caring friends, school counselors, and teachers. Help and support are important during this exciting, but important decision-making time!

TAKING CARE OF YOU!

Eating right, sleeping enough, exercising, managing relationships, and controlling stress (and many other factors) takes work. **YOU have to make the decision to live healthy!**

MENTAL HEALTH

! Need help getting started?

Your emotional well-being is just as important as your physical well-being. The pressure and stress of everyday life can really take a toll on you. Feeling sad, lonely, or depressed? **ASK for help!**

The National Suicide Prevention Lifeline offers these helpful tips:

- Overwhelming feelings? Talk to trusted family, friends, teachers and mentors for help right away.
- Feelings may feel impossible to handle, but they CAN be overcome. If it is hard to do on your own, seek support.
- Make a safety plan. Visit: suicidepreventionlifeline.org/help-yourself/
- You deserve to be respected. If you are in a toxic relationship of any kind, it's time to make a plan to get out. Talk to a trusted adult, seek medical help, or call the "love is respect" helpline at 866-331-9474. (You can also text 'LOVEIS' to 22522, or visit www.loveisrespect.org/get-relationship-help/)

Intervene when you witness somebody:

- talking about death/suicide
- sharing feelings of hopelessness, being trapped, or being burdensome to others
- increasing anxious and/or reckless behavior
- showing rage and/or having extreme mood swings
- sleeping a lot or too little
- increasing substance abuse

Watch out for others!
Here are some

warning signs

that intervention and help may be needed!

Suicide & Crisis Lifeline

Available every day, 24 hours a day.

DIAL: 988

www.988lifeline.org

HARMFUL SUBSTANCES

ALCOHOL. Think it's "just a drink"? Here are the risks:

- ✓ heart disease ✓ liver disease ✓ cancer ✓ memory loss
- ✓ weakened immune system ✓ anxiety ✓ depression
- ✓ injuries ✓ increased chance of accidental death
- ! The list goes on. Read more: cdc.gov/alcohol/fact-sheets/alcohol-use.htm¹

VAPING. It's not "just vapor." **E-cigs, vape pens, etc., all contain these harmful chemicals:**

- ✓ nicotine (a highly addictive substance)
- ✓ carcinogens (cancer-forming chemicals)
- ✓ heavy metals (nickel, tin, and lead)
- ✓ benzene (volatile organic compound found in car exhaust)
- ✓ diethylene glycol and propylene glycol (chemicals used to make antifreeze)
- ✓ chemical flavorants and ultrafine particles that get inhaled deep into the lungs.^{2,3}

SOURCES:

- 1 "Drinking Too Much Alcohol Can Harm Your Health. Learn the Facts," Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, 11 May 2021, <https://www.cdc.gov/alcohol/fact-sheets/alcohol-use.htm>.
- 2 "Know the Risks: E-Cigarettes & Young People: U.S. Surgeon General's Report," E, <http://e-cigarettes.surgeongeneral.gov/>.
- 3 What's in an E-Cigarette? American Lung Association, lung.org/quit-smoking/e-cigarettes-vaping/what-in-an-e-cigarette.

NEWS FLASH
The brain does not stop developing until about age 25...

...Drinking alcohol, vaping, smoking, and other substance abuse is detrimental to the brain's growth and development!

PARTS OF SPEECH

Noun: Proper nouns are capitalized and refer to specific persons, objects, ideas, or places.

Examples: John White House
Monday Slovakia

Common nouns refer to any person, object, place, or idea.

Examples: house building boy
city anger desk

Pronoun: Pronouns take the place of a noun.

Example: Tom washed *his* car on *his* day off.

Verb: Verbs show action or state of being. They also indicate the time of that state or action.

Examples: He *worked* on Friday. (*past*)
I *need* to place the order. (*present*)
He *will present* his report tomorrow. (*future*)

Adjective: Adjectives describe nouns by modifying them. They can specify color, size, number, etc.

Example: The *green* van struck the *metal* pole near the *third* intersection.

Adverb: Adverbs are words which describe verbs, other adverbs, or adjectives. They specify in what manner, when, how much, and where.

Example: The crowd reacted *violently* when it was confronted.

Preposition: Prepositions indicate how nouns and pronouns are related to another word in a sentence.

Examples: Paul stood *behind* the fence.
The cat jumped *onto* the bed.

Conjunction: Conjunctions join words, clauses, and phrases.

Examples: Your drink options are *either* coffee or tea.
John could not react fast enough *because* of a poorly healed foot.

Interjection: Interjections are words that convey emotion. They are often indicated by the use of an exclamation point.

Example: *Wow!* What a beautiful car!

PUNCTUATION

Period: Use at the end of a declarative sentence.

Example: We arrive at school each day at 8 am.

In addition, use a period at the end of an imperative sentence that does not express strong emotions.

Example: Sit down.

Comma: Use to separate words and phrases in a series.

Example: Bill has two dogs, one cat, and a hamster.

Question Mark: Use after all interrogative sentences.

Example: Where did you go on vacation?

Exclamation Mark: Use after sentences that express surprise or feeling.

Example: You scared me!

Semicolon: Use to combine two closely related sentences.

Example: The road was bumpy and curvy; the scenery was grand.

Colon: Use a colon to start a list or to formally introduce a statement.

Example: He has three cars: a Mustang, Camaro, and a Duster.

Quotation Marks: Use quotation marks around a direct quotation.

Example: He said, "I want to go home."

Apostrophe: Use an apostrophe to show contracted words such as it's (for it is) or to show possession as in Bill's bike.

GRAMMAR ERRORS

Sentence Fragment: A group of words, either short or long, which does not give a complete thought.

Example: Incorrect—A blue convertible.

Correct—The new car is a blue convertible.

Possessive Nouns: Nouns which show ownership, connection, or possession.

Examples: Tom's book, the band's music, Tanya's mother

Remember these rules when forming the possessive of common nouns:

1. If the noun is plural and ends in an "s," add an apostrophe. **Example:** cars becomes cars'
2. If the noun does not end in an "s," add an 's. **Example:** dog becomes dog's.

Misplaced Modifier: The incorrect placement of a word or group of words in a sentence which indicates that it modifies one word, when it is supposed to modify another.

Example: Incorrect—I saw the piano walking into the room.

Correct—Walking into the room, I saw the piano.

Run-on Sentence: Two or more complete sentences written as one, often separated only by a comma.

Example: Incorrect—The time ran out quickly, we did not finish the test.

Correct—The time ran out quickly. We did not finish the test.

Tense Shift: Changing or mixing verb tenses in sentences or paragraphs.

Example: Incorrect—Tom bought the book and reads it quickly.

Correct—Tom bought the book and read it quickly.

Active, Passive Voice:

Active Voice—The subject of a sentence performs the verb's action.

Example: He reads all the new novels.

Passive Voice—The subject of the sentence receives the action of the verb.

Example: All the new novels are read by him.

The active voice is easier to understand and most often preferred.

Parallel Structure: Writing which uses words, phrases, clauses, and sentences in the same grammatical form.

Example: Incorrect—I enjoy swimming, walking by the pier and also to eat ice cream at the beach.

Correct—I enjoy swimming, walking by the pier, and eating ice cream at the beach.

PARAGRAPH WRITING

1. Write a topic sentence—The topic sentence tells the main idea of your paragraph.
2. List supporting ideas.
3. Make a rough outline—Eliminate irrelevant items.
4. Write the paragraph.
5. Add the clincher—A clincher sums up the paragraph.
6. Revise and edit—Make sure the sentences flow in an organized fashion.
7. Proofread—Read and correct grammar, spelling, etc.
8. Write the final copy.



WORDS OFTEN CONFUSED

accept: accept a gift
except: everyday except today

advice: listen to good advice

advise: Counselors advise students.

affect: His speech affected the listeners.

effect: the effect of the sun

already: He already ate.

all ready: I was all ready to leave.

altar: church's altar

alter: alter the clothes; alter the report

angel: angel in heaven

angle: a right angle

breath: out of breath

breathe: breathe fresh air

capital: nation's capital; a capital idea
capitol: a capitol building

cite: to cite a source

site: a building site

sight: a terrible sight to see

clothes: to wear clothes

cloths: cloths for cleaning

coarse: a coarse fabric; coarse language

course: a race course; a history course

complement: An attractive tie complements the suit.

compliment: He complimented her attitude.

counsel: The teacher gave the student good counsel.

council: The council voted against the action.

desert: a dry, hot desert

dessert: pie for dessert

forth: go forth into the crowd

fourth: fourth in line

hoping: hoping for a good grade

hopping: a hopping rabbit

its: the color of its eyes

It's: It's cloudy outside.

loose: a loose connection; loose clothing

lose: lose a toy

mantel: the fireplace mantel

mantle: (cape or cloak) He put on the mantle.

passed: passed a test; passed an automobile

past: lived in the past; past errors

peace: live in peace
piece: piece of cake

precede: The National Anthem precedes the game.

proceed: Proceed with your report.

principal: the principal reason; a school's principal

principle: the principle of good manners

quiet: the quiet night
quite: quite handsome

right: the right direction

rite: the rites of passage

write: write a letter

shone: The sun shone on the valley.

shown: He was shown the evidence.

sole: the sole survivor
soul: body, soul, and spirit

stationary: a stationary object

stationery: correspondence written on stationery

steal: to steal money

steel: a bridge made of steel

than: bigger than a bread box

then: We ate lunch, and then it was time for a nap.

there: over there

their: their house

they're: They're not here.

to: to the car; to cheer

too: I want some too; too often

two: two soft drinks

troop: Boy Scout troop
troupe: a theatrical troupe

wander: He wandered aimlessly.

wonder: I wonder what happened.

weak: weak from starvation

week: a week from today

weather: hot, humid weather

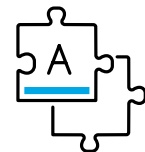
whether: It doesn't matter whether we go or stay.

who's: Who's at the door?

whose: Whose house is this?

your: Your feet are dirty.

you're: You're angry.



FIGURATIVE LANGUAGE

Simile: A simile is a comparison between unlike things using the words “like” or “as.”

Examples: He was motionless *like* a statue. She was quiet *as* a mouse.

Hyperbole: A hyperbole is an extended exaggeration.

Example: I have a *ton* of questions to ask.

Metaphor: A metaphor is a comparison between unlike things in which one thing becomes another.

Example: Her *eyes were sparkling diamonds*.

Personification: Personification is attributing human characteristics to an inanimate object or animal.

Example: The fox *begged* the hunters to chase him.

CAPITALIZATION RULES

- The first word in a sentence.
- Days of the week, months, holidays, periods and eras in history, trade names, streets, formal documents, geographical names, political parties, holy days, and official titles.
- Words such as history or math when the words are a part of a specific course. Do not capitalize these words when they indicate a field of study.
- Words such as brother, mother, or doctor when they are a part of the title or when they are a substitute for the noun.
- Points of the compass. Do not capitalize words that indicate simple direction.
- Words that refer to the Supreme Being. Capitalize the word Bible, the books of the Bible, and the names of all holy books or sacred works.
- The first word in a direct quote.
- Words denoting religions, languages, nationalities, and races.
- Names of organizations.
- Degrees, titles, and abbreviations of organized groups.
- The first word of a title, the last word, and all words in between except short conjunctions or prepositions.
- The first word in a greeting or the closing of a letter.

WORDS OFTEN MISPELLED

accidentally
accommodate
achievement
acquitted
a lot
anoint
beneficial
benefited
broccoli
cemetery
changeable
choose
chose
compelled
congratulations

consensus
coolly
definitely
despair
desperate
development
embarrassment
eminent
exceed
existence
exhilarate
experience
fiery
foreign
grandeur

harass
height
immediately
inadvertent
incidentally
independent
indispensable
insistent
irresistible
irritable
liquefy
judgment
liaison
loneliness
memento

millennium
noticeable
occasion
occurrence
performance
permissible
perseverance
privilege
professor
pursue
receive
recommend
repetition
seize
separate

sergeant
severely
specifically
subpoena
succeed
succession
supersede
their
tomorrow
tyranny
weird
yield

MULTIPLICATION TABLE

MATHEMATICAL SYMBOLS

Listed below are commonly encountered symbols.

Angle:	<
Arc:	∩
Greater than:	>
Greater than/equal to:	≥
Less than:	<
Less than/equal to:	≤
Line segment:	—
Not equal:	≠
Parallel:	∥
Perpendicular:	⊥
Pi:	π
Ray:	→
Right angle:	⊞
Set:	{ }

	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

ALGEBRA

Quadratic Equation:

if $ax^2 + bx + c = 0$ then $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

Special Products:

$$(a - b)^2 = a^2 - 2ab + b^2$$

$$(a - b)(a + b) = a^2 - b^2$$

$$a^3 + b^3 = (a + b)(a^2 - ab + b^2)$$

$$a^3 - b^3 = (a - b)(a^2 + ab + b^2)$$

$$(a + b)^2 = a^2 + 2ab + b^2$$

$$a(b + c) = ab + ac$$

$$(a + b)^3 = a^3 + 3a^2b + 3ab^2 + b^3$$

$$(a - b)^3 = a^3 - 3a^2b + 3ab^2 - b^3$$

Law of Exponents: If $a, b \in \mathbb{R}$, $a, b \geq 0$, and $p, q, r, s \in \mathbb{Q}$ then:

$$1. a^r a^s = a^{r+s}$$

$$2. a^r / a^s = a^{r-s}$$

$$3. (a^r)^s = a^{rs}$$

$$4. (ab)^r = a^r b^r$$

$$5. (a/b)^r = a^r / b^r \quad (b \neq 0)$$

$$6. a^0 = 1 \quad (a \neq 0)$$

$$7. a^{-r} = 1/a^r \quad (a \neq 0)$$

$$8. a^{r/s} = \sqrt[s]{a^r} = (\sqrt[s]{a})^r$$

$$a^{1/2} = \sqrt{a}$$

$$a^{1/3} = \sqrt[3]{a}$$

Equations of a Line:

(m = slope; b = y intercept)

$$\text{Slope of a Line: } m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$\text{Slope-Intercept Form: } y = mx + b$$

$$\text{Point-Slope Form: } (y - y_1) = m(x - x_1)$$

Logarithms:

$$\text{Log } x^r = r \text{ Log } x$$

$$\text{Log } (xy) = \text{Log } x + \text{Log } y$$

$$\text{Log } (x/y) = \text{Log } x - \text{Log } y$$

$$\text{Log } x = n \leftrightarrow x = 10^n \quad (\text{common log})$$

$$\text{Log}_a x = n \leftrightarrow x = a^n \quad (\text{log to the base } a)$$

$$\text{Ln } x = n \leftrightarrow x = e^n \quad (\text{natural log})$$

$$\pi \approx 3.14159265$$

$$e \approx 2.71828183$$

Variation Models: For variables x, y , and z where k is a positive constant called the constant of variation.

$$\text{Direct Variation: } y = kx \text{ or } y/x = k$$

$$\text{Inverse Variation: } y = k/x \text{ or } xy = k$$

$$\text{Joint Variation: } z = kxy$$

EQUIVALENT MEASUREMENTS

English System

Area

1 acre	=	4840 sq. yds.
1 sq. mile	=	640 acres
1 sq. ft.	=	144 sq. inches
1 sq. yard	=	9 sq. ft.

Length/Distance

1 foot (ft)	=	12 inches
1 yard (yd)	=	3 feet
1 yard	=	36 inches
1 mile (mi)	=	1760 yards
1 mile	=	5,280 feet
1 nautical mile	=	1.15 miles
1 league	=	3 miles

Metric system

1 m ²	=	10,000 cm ²
1 hectare (ha)	=	10,000 m ²
1 km ²	=	100 ha
1 metric ton (t)	=	1000 kg

Volume

1 tablespoon (T)	=	3 teaspoons (t)
1 cup (c)	=	16 T
1 cup	=	8 fluid oz. (fl. oz.)
1 pint (pt)	=	2 c
1 quart (qt)	=	2 pt
1 quart	=	4 c
1 quart	=	32 fl. oz.
1 gallon (gal)	=	4 qt

Weight

1 pound (lb)	=	16 oz
1 ton	=	2000 lbs

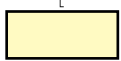
ENGLISH/METRIC CONVERSION

	If you know—	You can find—	By multiplying by
Length	inches	millimeters	25
	feet	centimeters	30
	yards	meters	0.9
	miles	kilometers	1.6
Area	square inches	square centimeters	6.5
	square feet	square meters	0.09
	square yards	square meters	0.8
	square miles	square kilometers	2.6
Mass	ounces	grams	28
	pounds	kilograms	0.45
Liquid Volume	ounces	milliliters	30
	pints	liters	0.47
	quarts	liters	0.95
	gallons	liters	3.8
Temperature	degrees Fahrenheit	degrees Celsius	subtract 32 and multiply by 5/9

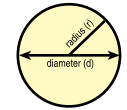
PERIMETER AND CIRCUMFERENCE

Perimeter: The distance around an object.

Circumference: The distance around a circle.

Polygon: $2(L + w)$ 

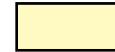
Circle: πd or $2\pi r$



AREA

L = length; w = width; h = height; s = side; b = base; r = radius

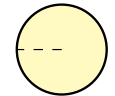
Rectangle: $L \cdot w$



Square: s^2



Circle: πr^2



Parallelogram: $b \cdot h$



Trapezoid: $\frac{1}{2}(b_1 + b_2)h$



Triangle: $\frac{1}{2}b \cdot h$



SURFACE AREA AND VOLUME

Surface Area: Find the area of each face and total.

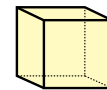
Volume of Prisms: Find the area of the base (b) and multiply by the height (h).

Rectangular

Prism: $v = L \cdot w \cdot h$



Cube: $v = s^3$

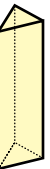


Cylinder Volume: $v = \pi r^2 h$

Surface Area: $sa = 2\pi r^2 + 2\pi r h$



Triangular Prism: $v = b \cdot h$

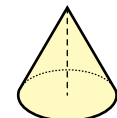


Sphere Volume: $v = \frac{4}{3}\pi r^3$

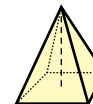
Surface Area: $sa = 4\pi r^2$



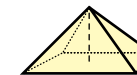
Cone: $v = \frac{1}{3}\pi r^2 h$



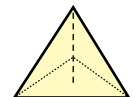
Pyramid Area: Find the area of the base (b); multiply by the height (h); and divide by 3.



Rectangular Pyramid: $v = \frac{1}{3}bh$



Square Pyramid: $v = \frac{1}{3}bh$

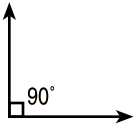


Triangular Pyramid: $v = \frac{1}{3}bh$

ANGLES AND TRIANGLES

All angles of a triangle add up to 180°.

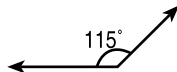
Right Angle: equals 90°



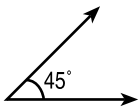
Straight Angle: equals 180°



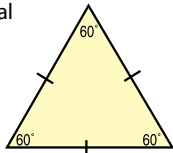
Obtuse Angle: greater than 90° but less than 180°



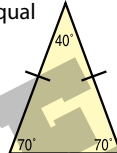
Acute Angle: less than 90° but greater than 0°



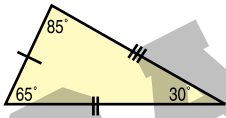
Equilateral Triangle: all sides equal; all angles equal



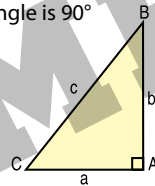
Isosceles Triangle: two sides equal; two angles equal



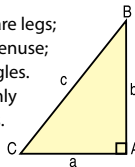
Scalene Triangle: no sides equal; no angles equal



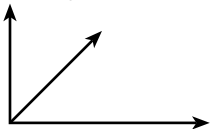
Right Triangle: one angle is 90°



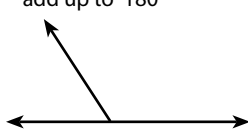
Pythagorean Theorem: sides a and b are legs; side c is hypotenuse; $a^2 + b^2 = c^2$ angles. This applies only to right angles.



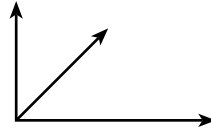
Complementary Angles: two angles add up to 90°



Supplementary Angles: two angles add up to 180°

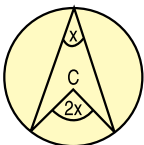


Complete Angle Rotation: equals 360°

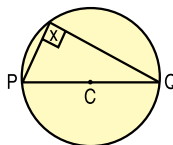


CIRCLE THEOREMS

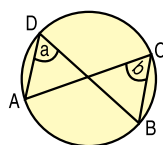
C is the center of the circle



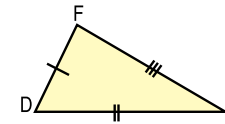
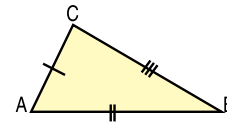
$\angle x = 90^\circ$ PQ is a diameter



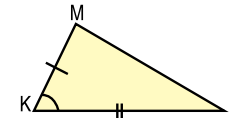
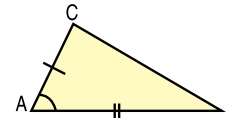
$\angle a = \angle b$ angles subtended on the same arc AB



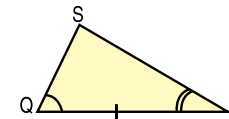
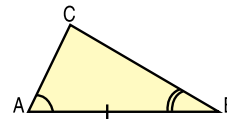
CONGRUENCY CASES



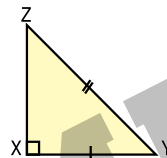
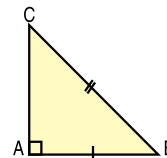
S.S.S. (Side, Side, Side):
 $\triangle ABC \cong \triangle DEF$



S.A.S. (Side, Angle, Side):
 $\triangle ABC \cong \triangle KLM$

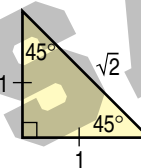


A.S.A. (Angle, Side, Angle):
 $\triangle ABC \cong \triangle QRS$



H.S. (Hypotenuse, Side):
 $\triangle ABC \cong \triangle XYZ$

TRIGONOMETRY



$$\begin{aligned} \sin 45^\circ &= 1 / \sqrt{2} \\ \cos 45^\circ &= 1 / \sqrt{2} \\ \tan 45^\circ &= 1 \\ \tan \theta &= \sin \theta / \cos \theta \end{aligned}$$

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

$$\begin{aligned} \sin(A+B) &= \sin A \cos B + \cos A \sin B \\ \sin(A-B) &= \sin A \cos B - \cos A \sin B \\ \sin 2A &= 2 \sin A \cos A \end{aligned}$$

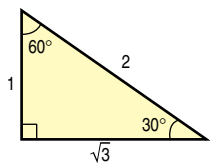
$$\begin{aligned} \sin \frac{1}{2}A &= \pm \sqrt{(1 - \cos A)/2} \\ \cos(A+B) &= \cos A \cos B - \sin A \sin B \\ \cos(A-B) &= \cos A \cos B + \sin A \sin B \\ \cos 2A &= \cos^2 A - \sin^2 A = 2\cos^2 A - 1 = 1 - 2\sin^2 A \\ \cos \frac{1}{2}A &= \pm \sqrt{(1 + \cos A)/2} \end{aligned}$$

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

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

$$\tan 2A = \frac{2 \tan A}{1 - \tan^2 A}$$

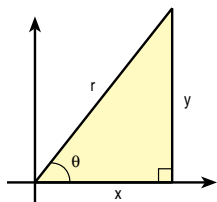
$$\tan \frac{1}{2}A = \frac{\pm \sqrt{(1 - \cos A)/(1 + \cos A)}}{1} = \frac{1 - \cos A}{\sin A} = \frac{\sin A}{1 + \cos A}$$



$$\begin{aligned}\sin 30^\circ &= 1/2 \\ \cos 30^\circ &= \sqrt{3}/2 \\ \tan 30^\circ &= 1/\sqrt{3}\end{aligned}$$

$$\begin{aligned}\sin 60^\circ &= \sqrt{3}/2 \\ \cos 60^\circ &= 1/2 \\ \tan 60^\circ &= \sqrt{3}\end{aligned}$$

$$\begin{aligned}\sin \theta &= y/r \text{ (opposite/hypotenuse)} &= 1/\csc \theta \\ \cos \theta &= x/r \text{ (adjacent/hypotenuse)} &= 1/\sec \theta \\ \tan \theta &= y/x \text{ (opposite/adjacent)} &= 1/\cot \theta\end{aligned}$$

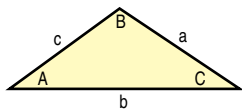


Law of Sines:

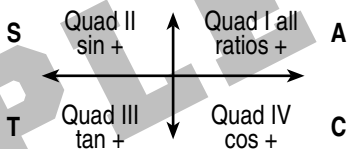
$$a/\sin A = b/\sin B = c/\sin C$$

Law of Cosines:

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

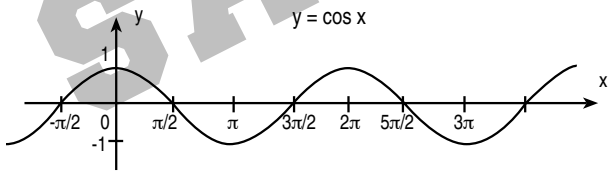


CAST

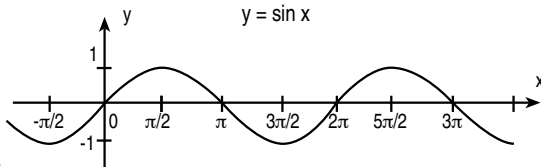


TRIGONOMETRIC AND CIRCULAR FUNCTION GRAPHS

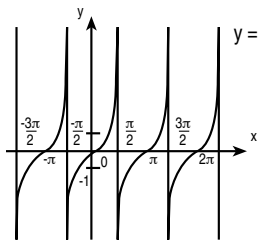
$$y = \cos x$$



$$y = \sin x$$



$$y = \tan x$$



GROUP	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18																																			
PERIOD 1	1 H HYDROGEN 1.00794	2 He HELIUM 4.002602																																																			
PERIOD 2	3 Li LITHIUM 6.941	4 Be BERYLLIUM 9.0122	5 B BORON 10.811	6 C CARBON 12.011	7 N NITROGEN 14.007	8 O OXYGEN 15.999	9 F FLUORINE 18.998	10 Ne NEON 20.180	11 Na SODIUM 22.990	12 Mg MAGNESIUM 24.305	13 Al ALUMINUM 26.982	14 Si SILICON 28.086	15 P PHOSPHORUS 30.974	16 S SULFUR 32.06	17 Cl CHLORINE 35.45	18 Ar ARGON 39.948	19 K POTASSIUM 39.098	20 Ca CALCIUM 40.078																																			
PERIOD 3	19 K POTASSIUM 39.098	20 Ca CALCIUM 40.078	21 Sc SCANDIUM 44.956	22 Ti TITANIUM 47.88	23 V VANADIUM 50.942	24 Cr CHROMIUM 51.996	25 Mn MANGANESE 54.938	26 Fe IRON 55.845	27 Co COBALT 58.933	28 Ni NICKEL 58.693	29 Cu COPPER 63.546	30 Zn ZINC 65.38	31 Ga GALLIUM 69.723	32 Ge GERMANIUM 72.64	33 As ARSENIC 74.922	34 Se SELENIUM 78.972	35 Br BROMINE 79.904	36 Kr KRYPTON 83.80	37 Rb RUBIDIUM 85.468	38 Sr STRONTIUM 87.62																																	
PERIOD 4	19 K POTASSIUM 39.098	20 Ca CALCIUM 40.078	21 Sc SCANDIUM 44.956	22 Ti TITANIUM 47.88	23 V VANADIUM 50.942	24 Cr CHROMIUM 51.996	25 Mn MANGANESE 54.938	26 Fe IRON 55.845	27 Co COBALT 58.933	28 Ni NICKEL 58.693	29 Cu COPPER 63.546	30 Zn ZINC 65.38	31 Ga GALLIUM 69.723	32 Ge GERMANIUM 72.64	33 As ARSENIC 74.922	34 Se SELENIUM 78.972	35 Br BROMINE 79.904	36 Kr KRYPTON 83.80	37 Rb RUBIDIUM 85.468	38 Sr STRONTIUM 87.62	39 Y YTIORIUM 88.906	40 Zr ZIRCONIUM 91.224	41 Nb NIOBIUM 92.906	42 Mo MOLYBDENUM 95.94	43 Tc TECHNETIUM 98.906	44 Ru RHODIUM 101.07	45 Rh RHENIUM 102.91	46 Pd PALLADIUM 106.42	47 Ag SILVER 107.87	48 Cd CADMIUM 112.41	49 In INDIUM 114.82	50 Sn STANNUM 118.71	51 Sb ANTIMONY 121.75	52 Te TELLURIUM 127.6	53 I IODINE 126.91	54 Xe XENON 131.29	55 Cs CAESIUM 132.91	56 Ba BARIUM 137.33															
PERIOD 5	19 K POTASSIUM 39.098	20 Ca CALCIUM 40.078	21 Sc SCANDIUM 44.956	22 Ti TITANIUM 47.88	23 V VANADIUM 50.942	24 Cr CHROMIUM 51.996	25 Mn MANGANESE 54.938	26 Fe IRON 55.845	27 Co COBALT 58.933	28 Ni NICKEL 58.693	29 Cu COPPER 63.546	30 Zn ZINC 65.38	31 Ga GALLIUM 69.723	32 Ge GERMANIUM 72.64	33 As ARSENIC 74.922	34 Se SELENIUM 78.972	35 Br BROMINE 79.904	36 Kr KRYPTON 83.80	37 Rb RUBIDIUM 85.468	38 Sr STRONTIUM 87.62	39 Y YTIORIUM 88.906	40 Zr ZIRCONIUM 91.224	41 Nb NIOBIUM 92.906	42 Mo MOLYBDENUM 95.94	43 Tc TECHNETIUM 98.906	44 Ru RHODIUM 101.07	45 Rh RHENIUM 102.91	46 Pd PALLADIUM 106.42	47 Ag SILVER 107.87	48 Cd CADMIUM 112.41	49 In INDIUM 114.82	50 Sn STANNUM 118.71	51 Sb ANTIMONY 121.75	52 Te TELLURIUM 127.6	53 I IODINE 126.91	54 Xe XENON 131.29	55 Cs CAESIUM 132.91	56 Ba BARIUM 137.33	57 Fr FRANCIUM 223	58 Ce CESIUM 132.91	59 Pr PRASEODYMIUM 140.91	60 Nd NEODYMIUM 144.24	61 Pm PROMETHIUM 145	62 Sm SAMARIUM 150.36	63 Eu EUROPIUM 151.96	64 Gd GADOLINIUM 157.25	65 Tb TERBIUM 158.93	66 Dy DYSIDIUM 162.50	67 Ho HOLIUM 164.93	68 Er ERBIUM 167.26	69 Tm THULIUM 168.93	70 Yb YTERBIUM 173.05	71 Lu LUTETIUM 175.05
PERIOD 6	55 Cs CAESIUM 132.91	56 Ba BARIUM 137.33	57 Fr FRANCIUM 223	58 Ce CESIUM 132.91	59 Pr PRASEODYMIUM 140.91	60 Nd NEODYMIUM 144.24	61 Pm PROMETHIUM 145	62 Sm SAMARIUM 150.36	63 Eu EUROPIUM 151.96	64 Gd GADOLINIUM 157.25	65 Tb TERBIUM 158.93	66 Dy DYSIDIUM 162.50	67 Ho HOLIUM 164.93	68 Er ERBIUM 167.26	69 Tm THULIUM 168.93	70 Yb YTERBIUM 173.05	71 Lu LUTETIUM 175.05	72 Hf HAFNIUM 178.49	73 Ta TANTALUM 180.95	74 W WOLYBIUM 183.85	75 Re RHENIUM 186.21	76 Os OSMIUM 190.23	77 Ir IRIDIUM 192.22	78 Pt PLATINUM 195.08	79 Au GOLD 196.97	80 Hg MERCURY 200.59	81 Tl THALLIUM 204.38	82 Pb LEAD 207.2	83 Bi BISMUTH 208.98	84 Po POLONIUM 209	85 At ASTATINE 210	86 Rn RADON 222	87 Fr FRANCIUM 223	88 Ra RADIUM 226	89 Ac ACTINIUM 227	90 Th THORIUM 232.04	91 Pa PROTACTINIUM 231.04	92 U URANIUM 238.03	93 Np NEPTUNIUM 237.05	94 Pu PLUTONIUM 244	95 Am AMERICIUM 243	96 Cm CURIUM 247	97 Bk BERKELIUM 247	98 Cf CALIFORNIUM 251	99 Es EINSTEINIUM 252	100 Fm FERMIUM 257	101 Md MEDECIUM 258	102 No NIOBIUM 259	103 Lr LAWRENCIUM 262				
PERIOD 7	87 Fr FRANCIUM 223	88 Ra RADIUM 226	89 Ac ACTINIUM 227	90 Th THORIUM 232.04	91 Pa PROTACTINIUM 231.04	92 U URANIUM 238.03	93 Np NEPTUNIUM 237.05	94 Pu PLUTONIUM 244	95 Am AMERICIUM 243	96 Cm CURIUM 247	97 Bk BERKELIUM 247	98 Cf CALIFORNIUM 251	99 Es EINSTEINIUM 252	100 Fm FERMIUM 257	101 Md MEDECIUM 258	102 No NIOBIUM 259	103 Lr LAWRENCIUM 262	104 Rf RUFORDIUM 261	105 Db DUBNIUM 262	106 Sg SEBASTIUM 263	107 Bh BOHRIUM 264	108 Hs HASSIUM 265	109 Mt MOSCOVIUM 266	110 Ds DUBNIUM 267	111 Rg ROSGONIUM 268	112 Cn COPIERNICIUM 269	113 Nh NIHONIUM 270	114 Fl FLEROVIUM 271	115 Mc MOSCOVIUM 272	116 Lv LIVERMORIUM 273	117 Ts TENNESSIUM 274	118 Og OGANESSON 276	119 Nh NIHONIUM 270	120 Ds DUBNIUM 267	121 Uu UNUNBIUM 277	122 Uub UNUNBIUM 278	123 Uut UNUNTRIUM 279	124 Uuq UNUNQUADIUM 280	125 Uup UNUNPENTIUM 281	126 Uuq UNUNQUADIUM 282	127 Uuh UNUNHEPTIUM 283	128 Uuq UNUNQUADIUM 284	129 Uuh UNUNHEPTIUM 285	130 Uuq UNUNQUADIUM 286	131 Uuh UNUNHEPTIUM 287	132 Uuq UNUNQUADIUM 288							

MEASUREMENTS OF ASTRONOMY

Measurement	Earth	Sun	Moon
Mass (m)	5.98×10^{24} kg	1.99×10^{30} kg	7.35×10^{22} kg
Radius (r)	6.37×10^3 km	6.96×10^5 km	1.74×10^3 km
Average Density	5.52 g/cm^3	1.42 g/cm^3	3.34 g/cm^3

SPECIFIC HEAT OF COMMON MATERIALS IN:

$$\frac{\text{J}}{\text{kg} \cdot \text{K}}$$

Water = 4180	Aluminum = 903	Copper = 385
Alcohol = 2450	Carbon = 710	Brass = 376
Ice = 2060	Glass = 664	Silver = 235
Steam = 2020	Iron = 450	Lead = 130

PHYSICS EQUATIONS

Acceleration

$$a = \frac{v_f - v_i}{t}$$

v_f is final velocity; v_i is initial velocity; t is time

Density

$$D = \frac{m}{v}$$

m is mass; v is volume

Distance $d = v \cdot t$

v is velocity; t is time

Distance

$$d = v_i \cdot t + \frac{1}{2} \cdot a \cdot t^2$$

v_i is initial velocity; t is time; a is acceleration

Electrical Current

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

Q is electric charge flowing; t is time

Electrical Energy

$$W = V \cdot I \cdot t$$

V is voltage; I is current; t is time

Electrical Force

$$F_e = \frac{k \cdot Q_1 \cdot Q_2}{d^2}$$

Q_1, Q_2 are electrical charges; d is separation distance; k is Coulomb's constant

$$k = 9.0 \cdot 10^9 \frac{\text{N} \cdot \text{m}^2}{\text{C}^2}$$

Electrical Potential Difference

$$V = \frac{W}{Q}$$

V is volts; W is work done; Q is electric charge moving

Force of Gravity

$$F_g = G \frac{m_1 \cdot m_2}{r^2}$$

G is universal gravitational constant; m_1, m_2 are masses of the two objects; r is the distance between the centers of the objects

Heat Energy

$$H = c \cdot m \cdot \Delta T$$

c is specific heat; m is mass; ΔT is change in temperature

Kinetic Energy

$$\text{K.E.} = \frac{1}{2} \cdot m \cdot v^2$$

m is mass; v is velocity

Momentum

$$p = m \cdot v$$

m is mass; v is velocity

Net Force

$$F = m \cdot a$$

m is mass; a is acceleration

Power

$$W \text{ is work; } P = \frac{W}{t}$$

Power

$$P = V \cdot I$$

V is voltage; I is current

Work

$$W = F \cdot d$$

F is force; d is distance

BILL OF RIGHTS

Amendment I

Religious establishment prohibited. Freedom of speech, of press, and right to petition.

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

Right to bear and keep arms.

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

Conditions for housing soldiers.

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

Right of search and seizure regulated.

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

Provisions for prosecution. Trial and punishment. Compensation for private property taken for public use.

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 militia 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

Right to a speedy trial. Witnesses, etc.

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

Right of trial by jury.

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 reexamined in any court of the United States, than according to the rules of common law.

Amendment VIII

Excessive bail or fines. Prohibition of cruel punishment.

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

Amendment IX

Rule of construction of Constitution.

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

Amendment X

Rights of States under Constitution.

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.

NORTH AMERICA

COUNTRY CAPITALS



Africa

Algeria–Algiers	Democratic Republic of the Congo–Kinshasa	Libya–Tripoli	Seychelles–Victoria
Angola–Luanda	Djibouti–Djibouti	Madagascar–Antananarivo	Sierra Leone–Freetown
Benin–Porto-Novo	Burkina Faso–Ouagadougou	Malawi–Lilongwe	Somalia–Mogadishu
Botsswana–Gaborone	Burundi–Bujumbura	Mali–Bamako	South Africa–Pretoria*
Burkina Faso–Ouagadougou	Cameroun–Yaounde	Mauritania–Nouakchott	South Sudan–Juba
Burundi–Bujumbura	Cape Verde–Praia	Mauritius–Port Louis	Sudan–Khartoum
Cameroun–Yaounde	Central African Republic–Bangui	Mozambique–Maputo	Swaziland–Mbabane
Cape Verde–Praia	Chad–N'Djamena	Namibia–Windhoek	Tanzania–Dar es Salaam
Central African Republic–Bangui	Comoros–Moroni	Niger–Niamey	Togo–Lomé
Chad–N'Djamena	Congo–Brazzaville	Nigeria–Abuja	Tunisia–Tunis
Comoros–Moroni	Cote d'Ivoire–Yamoussoukro	Rwanda–Kigali	Uganda–Kampala
Congo–Brazzaville		Sao Tome & Principe–São Tomé	Zambia–Lusaka
Cote d'Ivoire–Yamoussoukro		Senegal–Dakar	Zimbabwe–Harare



Asia

Afghanistan–Kabul	Indonesia–Jakarta	Malaysia–Kuala Lumpur	Tajikistan–Dushanbe
Armenia–Yerevan	Iran–Tehran	Maldives–Male	Thailand–Bangkok
Azerbaijan–Baku	Iraq–Baghdad	Mongolia–Ulan Bator	Timor-Leste–Dili
Bahrain–Manama	Israel–Jerusalem	Nepal–Kathmandu	Turkey–Ankara
Bangladesh–Dhaka	Japan–Tokyo	Oman–Muscat	Turkmenistan–Ashgabat
Bhutan–Thimphu	Jordan–Amman	Pakistan–Islamabad	United Arab Emirates–Abu Dhabi
Brunei–Bandar Seri Begawan	Kazakhstan–Astana	Philippines–Manila	Uzbekistan–Tashkent
Burma–Nay Pyi Taw*	Korea, North–Pyongyang	Qatar–Doha	Vietnam–Hanoi
Cambodia–Phnom Penh	Korea, South–Seoul	Saudi Arabia–Riyadh	Yemen–Sanaa
China–Beijing	Kuwait–Kuwait City	Singapore–Singapore	
Cyprus–Nicosia	Kyrgyzstan–Bishkek	Sri Lanka–Colombo*	
Georgia–Tbilisi	Laos–Vientiane	Syria–Damascus	
India–New Delhi	Lebanon–Beirut	Taiwan–Taipei	



Australia and Oceania

AUSTRALIA	Kiribati–Tarawa	Palau–Melekeok	Tonga–Nuku'alofa
Australia–Canberra	Marshall Islands–Majuro	Papua New Guinea–Port Moresby	Tuvalu–Funafuti
	Micronesia–Palikir	Samoa–Apia	Vanuatu–Vila
OCEANIA	Nauru–Yaren District	Solomon Islands–Honiara	
Fiji–Suva	New Zealand–Wellington		



Europe

Albania–Tirana	Finland–Helsinki	Luxembourg–Luxembourg	San Marino–San Marino
Andorra–Andorra la Vella	France–Paris	Macedonia–Skopje	Serbia–Belgrade
Austria–Vienna	Germany–Berlin	Malta–Valletta	Slovakia–Bratislava
Belarus–Minsk	Greece–Athens	Moldova–Chisinau	Slovenia–Ljubljana
Belgium–Brussels	Hungary–Budapest	Monaco–Monaco	Spain–Madrid
Bosnia & Herzegovina – Sarajevo	Iceland–Reykjavik	Montenegro–Podgorica	Sweden–Stockholm
Bulgaria–Sofia	Ireland–Dublin	Netherlands–Amsterdam	Switzerland–Bern
Croatia–Zagreb	Italy–Rome	Norway–Oslo	Ukraine–Kyiv
Czech Republic–Prague	Kosovo–Pristina	Poland–Warsaw	United Kingdom–London
Denmark–Copenhagen	Latvia–Riga	Portugal–Lisbon	Vatican City (Holy See)–Vatican City
Estonia–Tallinn	Liechtenstein–Vaduz	Romania–Bucharest	
	Lithuania–Vilnius	Russia–Moscow	



North America

Antigua & Barbuda–St. John's	Cuba–Havana	Haiti–Port-au-Prince	St. Lucia–Castries
Bahamas–Nassau	Dominica–Roseau	Honduras–Tegucigalpa	St. Vincent & the Grenadines–Kingstown
Barbados–Bridgetown	Jamaica–Kingston	Jamaica–Kingston	Trinidad & Tobago–Port-of-Spain
Belize–Belmopan	Mexico–Mexico City	Nicaragua–Managua	U.S.A.–Washington D.C.
Canada–Ottawa	Nicaragua–Managua	Panama–Panama City	
Costa Rica–San José	Grenada–St. George	St. Kitts & Nevis–Basseterre	
	Guatemala–Guatemala City		



South America

Argentina–Buenos Aires	Chile–Santiago	Paraguay–Asunción	Venezuela–Caracas
Bolivia–La Paz*	Colombia–Bogotá	Peru–Lima	
Brazil–Brasília	Ecuador–Quito	Suriname–Paramaribo	
	Guyana–Georgetown	Uruguay–Montevideo	

*This country has multiple capitals. The official or administrative capital is listed.

WORLD MAP



WORLD MAP



2 YEAR CALENDAR

JULY 2024

2024-2025 SCHOOL YEAR

July 2024							August 2024							September 2024							October 2024						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6						1	2	3	1	2	3	4	5	6	7	1	2	3	4	5	6	7
7	8	9	10	11	12	13	4	5	6	7	8	9	10	8	9	10	11	12	13	14	6	7	8	9	10	11	12
14	15	16	17	18	19	20	11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19
21	22	23	24	25	26	27	18	19	20	21	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26
28	29	30	31				25	26	27	28	29	30	31	29	30						27	28	29	30	31		

November 2024							December 2024							January 2025							February 2025								
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S		
					1	2	1	2	3	4	5	6	7						1	2	3	4							1
3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11	2	3	4	5	6	7	8		
10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18	9	10	11	12	13	14	15		
17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25	16	17	18	19	20	21	22		
24	25	26	27	28	29	30	29	30	31					26	27	28	29	30	31	23	24	25	26	27	28				

March 2025							April 2025							May 2025							June 2025										
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S				
						1					1	2	3	4	5							1	2	3	1	2	3	4	5	6	7
2	3	4	5	6	7	8	6	7	8	9	10	11	12	4	5	6	7	8	9	10	8	9	10	11	12	13	14				
9	10	11	12	13	14	15	13	14	15	16	17	18	19	11	12	13	14	15	16	17	15	16	17	18	19	20	21				
16	17	18	19	20	21	22	20	21	22	23	24	25	26	18	19	20	21	22	23	24	22	23	24	25	26	27	28				
23	24	25	26	27	28	29	27	28	29	30				25	26	27	28	29	30	31	29	30									

July 2025							August 2025							September 2025							October 2025														
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S								
						1						1	2							1	2	3	4	5	6							1	2	3	4
6	7	8	9	10	11	12	3	4	5	6	7	8	9	7	8	9	10	11	12	13	5	6	7	8	9	10	11								
13	14	15	16	17	18	19	10	11	12	13	14	15	16	14	15	16	17	18	19	20	12	13	14	15	16	17	18								
20	21	22	23	24	25	26	17	18	19	20	21	22	23	21	22	23	24	25	26	27	19	20	21	22	23	24	25								
27	28	29	30	31			24	25	26	27	28	29	30	31	28	29	30					26	27	28	29	30	31								

November 2025							December 2025							January 2026							February 2026																		
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S												
						1						1	2	3	4	5	6							1	2	3							1	2	3	4	5	6	7
2	3	4	5	6	7	8	7	8	9	10	11	12	13	4	5	6	7	8	9	10	8	9	10	11	12	13	14												
9	10	11	12	13	14	15	14	15	16	17	18	19	20	11	12	13	14	15	16	17	15	16	17	18	19	20	21												
16	17	18	19	20	21	22	21	22	23	24	25	26	27	18	19	20	21	22	23	24	22	23	24	25	26	27	28												
23	24	25	26	27	28	29	28	29	30	31				25	26	27	28	29	30	31	22	23	24	25	26	27	28												

March 2026							April 2026							May 2026							June 2026								
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S		
1	2	3	4	5	6	7						1	2	3	4							1	2	1	2	3	4	5	6
8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9	10	7	8	9	10	11	12	13	
15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16	14	15	16	17	18	19	20		
22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23	21	22	23	24	25	26	27		
29	30	31					26	27	28	29	30			24	25	26	27	28	29	30	31	28	29	30					

2025-2026 SCHOOL YEAR

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SAT/SUN
1	2	3	4	5	6
8	9	10	11	12	13
15	16	17	18	19	20
22	23	24	25	26	27
29	30	31			28



GOALS

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			

STEP IT UP!

Utilize all available resources in learning about career options while you can! Talking with advisors, counselors, or finding a mentor to job shadow are all great ways to find the right career path for you.

MONDAY
JULY **22**

25 THURSDAY
JULY

Activities:

Hall Passes:	To:	Time:	Initial:	To:	Time:	Initial:
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Activities:

Hall Passes:	To:	Time:	Initial:	To:	Time:	Initial:
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TUESDAY
JULY **23**

26 FRIDAY
JULY

Activities:

Hall Passes:	To:	Time:	Initial:	To:	Time:	Initial:
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Activities:

Hall Passes:	To:	Time:	Initial:	To:	Time:	Initial:
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WEDNESDAY
JULY **24**

27 SATURDAY
JULY

28 SUNDAY
JULY

Activities:

Hall Passes:	To:	Time:	Initial:	To:	Time:	Initial:
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VOCAB



Effusive [ih-fyoo-siv] (Adjective)

Definition: expressing emotion excessively

Sentence: Mary Ann was *effusive* when she won the award.

Antonym: reserved, unemotional

AUGUST

2024

BACK TO SCHOOL



LIFE'S YOUR STAGE—STEP IT UP!

Picture yourself on center stage, the whole crowd is watching you and cheering you on as you perform! Throughout your

performance you are choosing what words to say and what moves to make next.

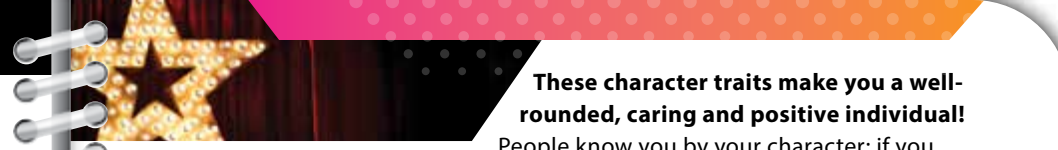
Performing on stage is like your daily life. You are in charge of everything you do every day and everyone around you sees your character in the actions you decide to take!

Make it a goal to shine in:

- ✓ responsibility
- ✓ optimism
- ✓ integrity
- ✓ grit
- ✓ generosity
- ✓ courage
- ✓ compassion
- ✓ cooperation
- ✓ respect
- ✓ innovation

this year!

MONDAY	TUESDAY	WEDNESDAY
5	6	7
12	13	14
19	20	21
26	27	28



These character traits make you a well-rounded, caring and positive individual!

People know you by your character; if you demonstrate these exceptional character traits, people will know they can count on you. In turn, you will find you have a more positive surrounding of like-minded individuals who show you their strong character as well! When you show good character, you will feel good about yourself. You will continue to grow in your relations with others, in your work environment and at home too.

As a natural part of living your life, you will face challenges.

These are times when you will have to decide what to do—when taking the right action may not be easy or the popular choice. During these challenges, it is important to rely on your strong character traits. Sometimes it is easier to make bad decisions that go against your character and morals. Instead, step up and stay true to yourself and your character will grow stronger! **It is time to let your character shine bright!**

THURSDAY	FRIDAY	SAT/SUN
1	2	3
		4
8	9	10
		11
15	16	17
		18
22	23	24
		25
29	30	31



GOALS

S	M	T	W	T	F	S	
		29	30	31	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	



STEP IT UP!

What do you want your life to look like five years from now? Write down your goals for your future. Post them where you'll see them every day. Ask a trusted friend to hold you accountable to them.

MONDAY
JULY 29

1 THURSDAY
AUGUST

Activities:

Hall Passes:	To:	Time:	Initial:	To:	Time:	Initial:
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Activities:

Hall Passes:	To:	Time:	Initial:	To:	Time:	Initial:
--------------	-----	-------	----------	-----	-------	----------

TUESDAY
JULY 30

2 FRIDAY
AUGUST

Activities:

Hall Passes:	To:	Time:	Initial:	To:	Time:	Initial:
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Activities:

Hall Passes:	To:	Time:	Initial:	To:	Time:	Initial:
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WEDNESDAY
JULY 31

3 SATURDAY
AUGUST

4 SUNDAY
AUGUST

Activities:

Hall Passes:	To:	Time:	Initial:	To:	Time:	Initial:
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VOCAB



Quiescence [kwee-es-uh nt] (Noun)

Definition: still, inactive, motionless

Sentence: Some animals fall into a state of *quiescence* during the winter.

Antonym: active

