



North South Foundation (NSF)

Vocabulary Workshop

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NSF - VOCABULARY



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North South Foundation

North South Foundation (NSF) is a volunteer driven non-profit organization established in Illinois, USA in 1989.

NSF Mission is to

- Encourage academic excellence among the poor by providing college scholarships in India regardless of religion, gender, caste and geographic origin
- Encourage academic excellence among the NRI children in USA in the areas of English spelling, vocabulary, math, science, geography, essay writing, public speaking and brain bee by focusing on contests, workshops, coaching and educational games
- Encourage academic excellence in India in English, math and science primarily in high schools and improve communication capabilities in professional colleges by focusing on workshops, creative learning and contests.

The Scholarship Program in India is designed to encourage academic excellence among the poor particularly who want to pursue professional courses like Diploma Engineering, Engineering and Medicine etc. It is targeted at qualified, needy students entering college. Over 1600 scholarships have been awarded in 2017-18. Each scholarship is in the range Rs.10,000/- to 25,000/- per student per year. Awards are made following strict selection criteria based on merit and need. Students are selected from 33 centers all over India: Aurangabad, Ahmedabad, Baroda, Bengaluru, Bhopal, Bhubaneswar, Chandigarh, Kochi, Chennai, Guwahati, Hyderabad, Jammu & Kashmir, Jodhpur, Kanpur, Kochi, Kolkata, Kurnool, Madurai, Moradabad, Mumbai, Nagercoil, Noida/Delhi, Panchkula, Patiala, Patna, Pune, Rewa, Satna, Tanuku, Udaipur, Vijayawada, Visakhapatnam, Tanjavur. These NSF centers are run by dedicated local volunteers.

Educational Contests in USA is designed to encourage academic excellence among Indian American children. The spelling, vocabulary, math, science, geography, essay writing, and public speaking bees are conducted annually in two steps. Children initially participate in one of 85 regional centres. Winners of these local contests compete at the national finals. National top three rankers are awarded scholarships ranging from \$1,000 to \$250, redeemable in the winners' freshman year of college. More than 120,000 contestants benefited from NSF contests so far. NSF introduced Human Values in 2014 to round out character building of a child to be a good citizen and a mantle of harmony.

Accomplishments of NSF Children: The winning streak in Scripps National Spelling Bee championship extended to 8th year in a row whereas National Geographic championship swung NSF way for the 4th year in a row in 2015. For the first time, NSF student won Math Counts championship in 2014. Similarly, NSF children won the first ever team championship in Middle School Science Bowl conducted by the U.S. government in Washington. These are like Super Bowl victories, unimaginable to repeat but faith and hard work favour the deserving.

Many of NSF students have been accepted into top ranking schools in USA like Harvard, MIT and Stanford. More importantly, these contests help children improve their communication skills, self-confidence and empower them to become better citizens of tomorrow.

Role Model Award: The Foundation awarded its inaugural Role Model Award, 'Vishwa Jyothi' to Rajiv Vinnakota in 2003, Nipun Mehta in 2004 and Nimo Patel in 2015 for their exceptional and inspiring work. It helps to showcase human values and academic excellence to the community. NSF will continue its efforts to identify and bring such individuals into limelight in both USA and India.

Educational Contests in India: NSF did a successful pilot programme in Hyderabad in late 2010 in Math, Science and Spelling. The positive experience and the demand for these contests has convinced NSF India, headquartered in Hyderabad, to deepen the commitment by bringing workbooks, training and contests in a streamlined process and introduce more modules in future as seen fit. It started with 125 registrants in Hyderabad and by 2015 the registrations jumped to over 6,000. The contests expanded to Bengaluru city and Rajiv Gandhi University of Knowledge Technologies (RGUKT) at Nuzvid campus and few others. These contests can be extended to other cities and states as NSF builds a bigger volunteer base to satisfy the need.

Educational contests in India are considered as another side of scholarship coin. Creative learning, focused interventions, and objective testing are part and parcel of NSF scholarship program. NSF is providing its services to both private and public sector institutions. Money is removed from being a hurdle for learning, much like cash scholarship program for higher education.

Expanding Reach: NSF teamed up with Navodaya Vidyalaya Samiti (NVS) in 2015 to improve scholastic achievements by conducting educational contests, in steps, in its eight regions of Jawahar Navodaya Vidyalaya (JNV) schools across the country.

JNV promotes creative learning as witnessed by its admission test which allocates 50% weight to "Mental ability Test". Striving for student empowerment is central to JNV efforts, which is very much the philosophy of NSF, making it a natural partnership. NSF scholarship criteria for extending its services, is fully satisfied by the student population of JNV.

NSF looks forward to a long association with JNV by providing its focused interventions to sharpen the skills of JNV students.

Please visit www.northsouth.org for more information.



Vocabulary Bee Benefits

- Building self-confidence and self-esteem
- Meeting other children and making new friends in our community
- Being able to stand up on a stage and talk
- Developing correct English usage
- Learning new concepts
- Improving communication skills
- Improving listening skills• Developing discipline
- Setting goals and meeting them• Competing against one's own ability, not against others
- Recognizing that hard work leads to success more so than innate intelligence
- Realizing that practice makes one perfect

JNV Format

- There are 2 levels of competition for Vocabulary Bee:
 - JVB (Junior Vocabulary Bee): Grades 7 and 8
 - SVB (Senior Vocabulary Bee): Grades 9, 10 and 11

What can schools do?

- Encourage reading!
- Limit TV viewership after 4th or 5th grade
- Read the news and discuss
- Listen to radio programs (simulates conversation, pronunciation of difficult words)
- Read road signs, billboards etc.

What should students do?

- Read, read, read!
- Read quality books that are age-appropriate or that match the student's spoken ability
- Look up any unfamiliar words in the dictionary.
- Use your new words!
- Word(s) of the day!



Building Your Vocabulary

- Learn words strategically. Learn a few new words a day, and review words that you have already studied. Learn synonyms and antonyms as well.
- Work with word roots. Knowing the meaning of common prefixes and roots will boost your chances of understanding new words.
- Determine if the word is "positive" or "negative." Some words "sound" as if they are positively or negatively charged. Know the "charge" of common prefixes and roots.
- Trust your instincts. If you think you know the meaning of a word, go with your hunch. Try to recall where you have heard the word used in the past and apply it to this new example.
- Use your knowledge of foreign languages. Many English words come from other languages. Try to apply your knowledge of foreign words to decipher unknown English words.

Word of the day

- Dictionary.com
- New York Times Learning Network - <http://www.nytimes.com/learning/students/wordofday/>
- Merriam-Webster Dictionary website - <http://www.m-w.com/cgi-bin/mwwod.pl>
- dictionary.com - malodorous \mal-OH-duhr-uhs\, adjective: Having a bad odor.
 - *But people were accustomed to the odors of chamber pots and outdoor privies and to the stench of manure on city streets as well as in the country. Even the most refined could scarcely have been squeamish about malodorous garbage.-- Susan Strasser, Waste and Want*
- Malodorous is from Latin mal-, "bad" + odorus, from odor, "smell."



Thesaurus

- Start with a pocket Thesaurus
- Learn synonyms and antonyms
- Use the words appropriately
- Roget's Thesaurus
- Use online Thesaurus

Reading strategies

- Post-it tagging
- Try to decipher from context
- Look up roots, prefixes and suffixes!
- Will improve your reading comprehension
- Highlight and look up!

Online Vocabulary Resources

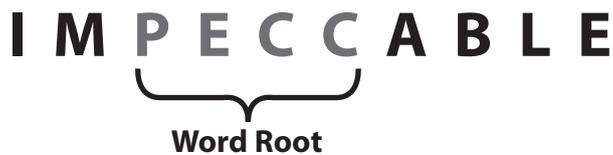
- <http://grammar.ccc.commnet.edu/grammar/vocabulary.htm>
- <http://www.readwritethink.org/index.asp>

The Shape of A Word

- | | |
|---|---|
| <ul style="list-style-type: none">• Letter or a group of letters• Attached to the beginning• Changes the word meaning | <ul style="list-style-type: none">• Letter or a group of letters• Attached to the end• Changes the word's meaning |
|---|---|

Prefix

Suffix



- The foundation for the meaning of the word



Vocabulary Acquisition Strategy #1

- Learning key roots
- Not only are these useful in math class right away, but they will also help you in the future
 - Shapes
 - Numbers
 - Size
 - Amount

Vocabulary Acquisition Strategy #2

- Learning positive and negative values for words
- Positive prefixes:

Prefix	Meaning of prefix	Example words and meanings
Ben-, bene-, bon-	Good	Benefit – a good result
Pro-	For, toward	Project – to push or thrust outward
Ad-, ac-, at-, as-	To, toward, at	Attend – to pay attention to or heed
Eu	Good	Euphoria – a feeling of great joy

- Negative prefixes:
-these make the negative form of the rest of the word

Prefix	Meaning of prefix	Example words and meanings
Ab	away	Absent – away from where one should be
Mal-	bad	Malodorous – smelling bad
in-, ir-, im-, il-	Not, without	Incorrect – not correct
Dis-, dif-	Away, apart, not, to deny	Disinterested – not interested
Un-	Not	Unable – not able
De-	From, off, away	Dehydrated – not hydrated (dry)
Ant-, anti	Against, not	Antagonist – the “bad guy” in a story
Mis-	Less, wrong	Misinformed – to have wrong information

- Use different color flash cards for positive and negative words
- List off as many words as you can that begin with these prefixes and suffixes
- Sometimes, these prefixes can mean other things and there are other prefixes that are similar, so be careful to pick words that have either a positive or negative definition

Vocabulary Acquisition Strategy #3

- Learn the roots



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Summary

- Read, read, read
- Look up unfamiliar words
- Use new words in your everyday conversation
- Learn your roots, prefixes, and suffixes so you can recognize unfamiliar words and make educated guesses as to their meanings!



Prefixes



PREFIXES

The prefixes are: **ab -ad - be - com - de - dis - en - ex - in - pre - pro - re - sub - un.**

Why are these 14 prefixes important?

If you were to examine the 20,000 most used English words, you would find that about 5,000 of them contain prefixes and that 82% (about 4,100) of those words use one of only fourteen different prefixes out of all the available prefixes in the language

COM words.

Coherence, Committee, Communication, Comparative, Compassion, Compensation, Complication, Compulsion

1. Body of persons delegated or elected to consider a matter; a self-constituted organization to promote a common goal (noun)
Root MITT = send
2. Sorrow or pity aroused by the suffering or misfortune of another; sympathy (noun)
Root PASS = suffer, feel, endure
3. Information transmitted or exchanges; an interchange of ideas/opinions (noun)
Root MUN = obliging
4. An intricate or involved situation; something that makes a circumstance difficult (noun)
Root PLIC = fold
5. The act or state of sticking together or holding fast as parts of the same mass; logical interconnection (noun)
Root HER = stick
6. An irresistible impulse to do something; the state of occurring by overwhelming pressure (noun)
Root PULS = drive
7. Measured by likeness or difference; relating to the degree of grammatical change to show levels of quality, quantity or relation (adjective)
Root PAR = equal
8. The art or state of making amends for loss or injury; payment to an unemployed or injured worker or his/her dependents; salary (noun)
Root PENS = weigh, pay, hang

**“PRE” words.****Precaution, Predict, Predominant, Prejudice, Premature , Preoccupation, Presume , Prevail****Prefix PRE means “before, in advance.”**

1. To declare in advance; foretell on the basis of observation, experience or scientific reasoning (verb)
Root DICT = speak, declare

2. Care taken in advance; foresight; measure taken beforehand to prevent harm or secure good; safeguard (adjective)
Root CAV-CAUT = beware

3. Judgment from an unfair opinion; preconceived idea, usually unfavorable; unreasonable bias, intolerance or irrational hostility towards a group, race or person (noun)
Root JUDIC = judge, judgment

4. To gain ascendancy through strength or superiority; to triumph; to become effective; to urge successful; to persist (verb)
Root VAL = be strong

5. Having superior strength, influence or authority (adjective)
Root DOMIN = master, lord

6. Happening, arriving, existing or performed before the proper or usual time (adjective)
Root MATUR = ripe

7. To expect with confidence; to suppose to be true without proof (verb)
Root SUM = take, use

8. The engagement or absorption of one’s attention beforehand (noun)
Root CUP = to take



“RE” words.

Rebellious, Recognition, Reflect, Rehabilitation, Reliable, Respiration, Reunion, Revive

Prefix RE means “again, back.”

1. To bend or throw back waves of light, sound or heat; to think seriously and carefully (verb)
Root FLECT = bend
2. Act of knowing or remembering upon seeing; special notice; acknowledgment of something done (noun)
Root COGN = know
3. To bring or come back to life, consciousness, activity or use; to make fresh or strong again (verb)
Root VIV = live
4. Consistently dependable in character, judgment, performance or result (adjective)
Root LI-LIG = tie, bind, hold
5. Engaged in open, organized and often armed resistance to authority; insubordination (adjective)
Root BELL = war
6. The act or state of people coming together again after a separation (noun)
Root UN = one
7. A single, complete act of inhalation and exhalation of air; breathing (noun)
Root SPIR = breathe
8. The restoring to a former state, reputation, condition, health or state of efficiency (noun)
Root HABIL-HABIT = condition, dress

**SUB words.****Subconscious, Subdue, Submarine, Submission, Subscribe, Substance, Subterranean, Suppress****Prefix SUB means \"under, below.\"**

1. To overpower by superior force; to overcome; to prevail over; to conquer (verb)
Root DU-DUC-DUCT = lead

2. A naval combat vessel designed for underwater and on surface operations (noun)
Root MAR = the sea

3. A fundamental or characteristic part or quality; essential nature; material possessions (noun)
Root STAN-STA = stand

4. The act of offering something; the condition of yielding; being humble or compliant (noun)
Root MISS-MITT = send

5. To give consent or approval by signing one's name; to pledge with an amount; to enter one's name for a publication (verb)
Root SCRIB = write

6. Being, living or operating under the surface of the earth; existing or working in secret (adjective)
Root TERRA = earth

7. To put an end to the activities of (a person, group, etc.); to stop (a practice, custom, etc.) (verb)
Root PRESS = press

8. Existing within the mind but not immediately available to awareness (adjective)
Root SCI-SCIR = know



\“DIS\” words

Discreet, Disgrace , Dismal, Dispel, Disposable, Disrupt, Dissolve, Distortion

Prefix DIS means \“not, apart.\”

1. Misrepresentation of true meaning; alteration of the normal, natural, original shape or condition (noun)
Root TORT = twist
2. To break up into parts or pass into solution; to bring to an end; to be overcome emotionally (verb)
Root SOLV-SOLU = loosen
3. A discarding or destroying esp. in a systematic way; device used to reduce waste (noun)
Root POS = put, place
4. To break apart; to throw into disorder; to destroy, usually temporarily, the normal continuance or unity of (verb)
Root RUPT = break
5. The loss of respect; shame; dishonor; the condition of being out of favor (noun)
Root GRAC-GRAT = pleasing
6. To drive off in various directions; to disperse; to dissipate; to cause to vanish (verb)
Root PELL-PULS = drive, urge
7. Showing or causing gloom or depression (adjective)
Root MAL = bad, ill
8. Having or showing good judgment in conduct and esp. in speech; prudent (adjective)
Root CRET-CERN = separate, observe



\“UN\” words.

Unattractive, Unconscious, Unfinished, Unidentified, Unnecessary, Unpredictable, Unravel, Unworthy

Prefix UN means \“not, against, opposite.\”

1. Not aware or noticing facts or feelings relating to a part of one’s mental processes (adjective)
Root SCI-SCIR = know
2. Not to recognize as being or show to be the very person or thing known, described or claimed (adjective)
Root IDEN = the same
3. Not essential or dispensable; not inevitable; not inherent to a situation; not absolutely needed (adjective)
Root CESS-CED = go, yield
4. Not foretold or declared on the basis of observation, experience or scientific reasoning (adjective)
Root DICT = speak, say
5. To separate the threads or strands of; to pull apart; to bring out of a tangled state; to work out the problems of; to solve (verb)
Root “raffeln” (German) = to fray out, ravel
6. Not having the power or quality of appealing to the interest of; especially unpleasing (adjective)
Root TRACT = draw
7. Of a course, task or undertaking not brought to an end or completion; without a final coat of paint (adjective)
Root FIN = end, limit
8. Without having what is intrinsically excellent, admirable, useful or desirable; lacking moral or personal merit; valueless (adjective)
Root “wairthan” (German) = to become



ROOTS

CEPT which means TAKE, RECEIVE .

concept, exception, acceptable, intercept, precept. receptacle, perceptive, conception, acceptance

1. General notion or idea; an object of a thought; a theme or image (noun)
2. An instance or case not conforming to the general rule; act of excluding or leaving out (noun)
3. Meeting minimum requirements; pleasing to the receiver; welcome; agreeable; tolerable (adjective)
4. to stop or interrupt the course or progress of; to take, seize or halt (verb)

DICT which means SPEAK, DECLARE.

abdicate, addicted, contradiction, dedication, dictatorial, indictment, predicament, verdict

1. Formal accusation; any charge, serious criticism or cause for blame (noun)
2. Act of devoting wholly to a purpose or special use; inscription to a person (book) (noun)
3. To give up or renounce, esp. in a voluntary, public or formal manner (verb)
4. Characteristic of someone exercising absolute power or authority; imperious (adjective)

SEQU-SECUT which means FOLLOW .

consequent, consecutive, execute, execution, inconsequential, obsequious, persecute, prosecute, subsequent, sequel, sequence

1. Literary work that continues the narrative of preceding work (noun)
2. Having little importance; trivial; irrelevant (adjective)
3. Following one another in uninterrupted order or succession; marked by logical sequence (adjective)
4. To institute or conduct legal proceedings against; to follow up to completion (verb)



NAT which means **BE BORN**

SEQU-SECU which means **FOLLOW**.

TRACT-TRA which means **PULL, DRAW**.

WORDS: **Attractive, Consequence, Contract, Executive, Good-natured, International, Nativity, Portrait, Pursuit, Retraction, Subsequent, Unnatural**

1. Contrary to the laws and course of nature; at variance with what is normal and expected (adjective)
2. Having or showing a pleasant, kindly, agreeable disposition; amiable (adjective)
3. The state of being born, esp. with reference to the place of being produced (noun)
4. Between or among countries; pertaining to two or more countries or their citizens (adjective)
5. A painting, photograph or other likeness of a person, esp. one showing the face (noun)
6. Providing pleasure or delight, esp. in appearance; charming; alluring, arousing interest (adjective)
7. To draw together; to settle or establish by agreement; to restrict; to shorten (verb)
8. Withdrawal of an opinion, statement or promise as inaccurate or unjustified (noun)
9. Person or group having administrative or supervisory authority in an organization (noun)
10. Act of following in order to overtake; effort to secure or attain; quest (noun)
11. Effect, result or outcome of something occurring earlier; conclusion reached (noun)
12. Occurring or coming later or after; following in order of succession (adjective)



NAT which means **BE BORN**

SEQU-SECU which means **FOLLOW**.

TRACT-TRA which means **PULL, DRAW**.

WORDS: Abstract, Cognate, Distraction, Inconsequential, Naive, Nationality, Persecute, Portrayal, Protract, Secondary, Sequel, Supernatural

1. Descended from the same language; related by birth; of the same parentage or descent (adjective)
2. Being above or beyond what is explainable by natural law; attributed to ghosts and goblins (adjective)
3. Showing a lack of experience, judgment or information; having unaffected simplicity of nature (adjective)
4. People having a common origin, tradition, language and capability of forming a state; an ethnic group (noun)
5. Thoughts not part of concrete realities, specific objectives, or actual instances (adjective)
6. Act of making a likeness by drawing, carving, etc.; representing dramatically, as on the stage (noun)
7. To draw out or lengthen, esp. in time; to prolong (verb)
8. The act of drawing away or diverting; a person or thing that prevents concentration (noun)
9. Next after the first in order, rank or time; of lesser importance; not primary or original (adjective)
10. An event that follows or comes afterward; a work (novel or movie) that continues a story (noun)
11. Having little or no importance; lacking in significance; trivial (adjective)
12. To subject to harassing or cruel treatment; to oppress (verb)



NAT which means **BE BORN**

SEQU-SECU which means **FOLLOW**.

TRACT-TRA which means **PULL, DRAW**.

WORDS: Distraught, Ensue, Entreat, Innate, Intractable, Intrinsic, Nascent, Natal, Obsequious, Renaissance, Sectarian, Traction

1. Beginning to exist or develop; coming into existence; emerging (adjective)
2. Renewal; rebirth; period of time between the 14th & 17th centuries of great revival of art, literature and learning in Europe (noun)
3. Of or pertaining to a person's birth; accompanying birth (adjective)
4. Existing from birth; inborn; native; inherent in one's character (adjective)
5. Adhesive friction of a body on some surface; deliberate pulling of a muscle to correct dislocation (noun)
6. Bewildered; deeply agitated; crazed; troubled with doubt or mental conflict (adjective)
7. To ask or request something earnestly; to beseech; to implore; to beg (verb)
8. Hard to treat, relieve or cure; not docile or manageable; stubborn (adjective)
9. Part of the essential nature; inherent or belonging to by its very nature (adjective)
10. To follow in order; to come afterward, esp. in immediate succession; to follow as a consequence or a result (verb)
11. Showing servile complaisance or deference; sycophantic (adjective)
12. Narrowly confined or devoted to a particular religious faith, denomination or group with a uniting theme (adjective)



NSF - VOCABULARY

GRAD = step, walk, degree;

GRESS which means STEP, WALK, DEGREE.

MOT = move;

CAS/CID = fall, sink.

accidentally, aggression, cadaver, cadence, coincidence, congressman, digress, momentous, motivate, mutiny, progressive, promotion

The PROGRESSIVE CONGRESSMAN wanted a PROMOTION. Due to his AGGRESSION to obtain a position, he almost created a MUTINY among police officers. He demanded they solve the COINCIDENCE of a resident ACCIDENTALLY finding two CADAVERS in the park. To MOTIVATE their department, he made a MOMENTOUS decision. He dared to DIGRESS from acceptable behavior, purposely adjusting the CADENCE of his voice in a speech, and accused officers of their inability to solve these crimes.

1. Any offensive action, attack or procedure; hostility toward another (overt, verbal, gestural) (noun)
2. To turn aside or away from the main topic or argument in speaking or writing (verb)
3. A member of a national legislative body of the U.S.A., often capitalized (noun)
4. Advocating, making use of or having interest in new ideas, opportunities of findings (adjective)
5. Rebellion or resistance against authority, esp. by soldiers or sailors against their officers (noun)
6. Of great importance or consequence (adjective)
7. Advancement in position or rank; state of publicizing or advertising a product or cause (noun)
8. To provide with an incentive or goal; to impel; to incite (verb)
9. A rhythmic sequence or flow of sounds or words; the beat or rate of rhythmical movement (noun)
10. A corpse; a dead body, esp. a human one to be dissected (noun)
11. Occurring unexpectedly or by chance; happening through carelessness and often with unfortunate results (adverb)
12. Striking occurrence of two or more events at one time by mere chance; act of concurring exactly (noun)



GRAD	=	step, walk, degree; GRESS which means STEP, WALK, DEGREE.
MOT	=	move;
CAS/CID	=	fall, sink.

decadent, deciduous, degradation, demotion, gradient, mobilization, momentum, motif, occidental, recidivism, regressive, transgression

Work needed to be completed on the GRADIENT of a square in Japan. With the MOMENTUM of the MOBILIZATION of several trucks, OCCIDENTAL citizens despaired of the DEMOLITION of several DECIDUOUS trees. They had wanted a charming MOTIF for the property. People were also nervous about the landscape workers who had been released from prison. They had reason to fear RECIDIVISM because of a serious TRANSGRESSION earlier in the week. They wanted skilled, professional workers, not former inmates who might show REGRESSIVE behavior in this job. Skilled workers could not be subjected to DEGRADATION for an inferior job nor would they get a DEMOTION if their work were imperfect.

1. Going back to a previous state or place; decreasing in proportion to the increase in something else (adjective)
2. Degree of inclination of a highway, railroad, etc. or the rate of ascent or descent of a stream or river (noun)
3. Decline to a low, destitute or demoralized state; moral or intellectual decadence (noun)
4. The act of infringing, violating or breaking a law, command or duty; a sin (noun)
5. Usually distinctive and recurring subject, theme or idea, esp. in literary, artistic or musical works (noun)
6. The product of a body's mass and linear velocity; impetus resulting from movement (noun)
7. Act of assembling (armed forces) into readiness for active service (noun)
8. Reduction to a lower grade, rank or less important position (noun)
9. Repeated or habitual relapse into a previous mode of behavior (noun)
10. Marked by decline, decay or deterioration; given to moral degeneration (adjective)
11. Shedding the leaves annually (certain trees and shrubs); falling off at a particular season, stage or growth (leaves, horns, teeth) (adjective)
12. Western; the characteristics of people born in the countries of Europe and the Americas (adjective)



PLIC = fold, bend;

FAC-FIC = make, do;

COGN-NOT = know.

Accomplice, Diagnosis, Facade, Implicate, Noticeable, Notorious, Personification, Perplexed, Prognosticate, Replica, Suffice, Superficial

1. Caused to be puzzled or bewildered over what was not understood or certain; hampered with complication or confusion (adjective)
2. A person who knowingly helps another person in a crime or wrongdoing (noun)
3. Any close copy or reproduction of a work of art produced or supervised (noun)
4. To involve, usually in an incriminating manner or way (verb)
5. To be enough or adequate, as for needs or purposes; to satisfy (verb)
6. The front of a building, esp. an imposing or decorative one, facing a public way or space; a superficial appearance or illusion of something (noun)
7. Attribution of a human nature or character to inanimate objects or abstract notions; an embodiment (noun)
8. Being at, on or near the surface; apparent rather than real; shallow; not profound or thorough (adjective)
9. An analysis of the cause or nature of a problem or situation; an answer or solution to a problematic situation (noun)
10. Attracting attention; capable of being noteworthy; deserving of acknowledgement (adjective)
11. Widely and unfavorably known; famous in a negative manner (adjective)
12. To forecast from present signs or indications; to foreshadow; to predict (verb)



PLIC = **fold, bend;**

FAC-FIC = **make, do;**

COGN-NOT = **know.**

Agnostic, Cognizance, Complicity, Connoisseur, Faction, Incognito, Inexplicable, Olfactory, Pliable, Proficient, Ratification, Supplicate

1. Association, partnership or involvement in a wrongful act; something unlawful (noun)
2. Incapable of being understood; not made clear or intelligible (adjective)
3. Easily bent; flexible; supple; easily influenced or persuaded; adjusting readily (adjective)
4. To make respectful entreaty; to pray humbly; to ask for earnestly; to beseech (verb)
5. The confirmation by expressing consent, approval or formal sanction (noun)
6. A group or clique within a larger group, government or organization; party strife and intrigue (noun)
7. Fully competent in any art, science or subject; skilled (adjective)
8. Of or pertaining to the sense of smell (adjective)
9. With one's identity hidden, unknown, disguised or concealed (adjective)
10. A person believing that the existence of God & the essential nature of things are unknowable (noun)
11. Awareness or realization; notice; judicial notice taken by a court (noun)
12. Person esp. competent to pass critical judgments in an art or in matters of taste; a discerning judge of the best in any field (noun)



TRY IT OUT

abstract, benevolent, capricious, complacent, conciliatory, devious, diligent, discernible, dogmatic, eccentric, fallacious, indifferent, inquisitive, meticulous, pertinent, plausible, reticent

- Word #1: synonym = unconcerned, insensitive, nonchalant; antonym = caring, earnest
- Word #2: synonym = contented, satisfied, assured, smug; antonym = worried, disturbed
- Word #3: synonym = reserved, closed-mouthed, taciturn, self-contained;
antonym = forthcoming, talkative
- Word #4: synonym = curious, questioning, prying, investigating; antonym = ignoring, uninterested
- Word #5: synonym = attentive, earnest, careful, intense; antonym = lethargic, lazy, slothful
- Word #6: synonym = fussy, precise, fastidious, particular; antonym = careless, remiss, sloppy

1. Without interest or concern; not caring; neutral (adjective)

Root FERRE = to carry, bear, bring

2. Self-satisfied; unconcerned; content to a fault (adjective)

Root PLAC = to please

3. Disposed to be quiet or not speak freely; reserved (adjective)

Root TICERE - to be silent

4. Questioning; eager to learn; given to examination (adjective)

Root = QUAERO = to ask, seek

5. Constant and earnest in effort and application; persistent in doing something (adj)

Root = LIG-LEG = to choose

6. Taking or showing extreme care about minute details; painstaking; thorough (adj)

Root METI = to fear



TRY IT OUT

abstract, benevolent, capricious, complacent, conciliatory, devious, diligent, discernible, dogmatic, eccentric, fallacious, indifferent, inquisitive, meticulous, pertinent, plausible, reticent

1. Pertaining to a sense of beauty in nature and art (adjective)
Root AISTHE = perceive
2. Expressing goodwill or kind feelings to others (adjective)
Root BENE = good, kind, well
3. Regaining goodwill or favor; tending to placate (adjective)
Root CIL = unite, bring
4. Asserting opinions in a dictatorial manner (adjective)
Root DOGM = opinion
5. Unconventional; deviating from accepted practice (adjective)
Root CENT = middle, center
6. Deceptive; logically unsound; misleading (adjective)
Root FALL = deceive



TRY IT OUT

abstract, benevolent, capricious, complacent, conciliatory, devious, diligent, discernible, dogmatic, eccentric, fallacious, indifferent, inquisitive, meticulous, pertinent, plausible, reticent

- Word #1: synonym = sneaky, underhanded, contemptible; antonym = reliable, steady, dependable, sincere
- Word #2: synonym = fickle, inconsistent, flighty, undependable; antonym = reliable, steady
- Word #3: synonym = intangible, immaterial, ideal; antonym = concrete, tangible, solid, specific,
- Word #4: synonym = acceptable, believable, credible, likely; antonym = improbable, unattainable, impracticable
- Word #5: synonym = perceptible, understandable, lucid, distinct; antonym = confused, muddled
- Word #6: synonym = material, apropos, germane, applicable; antonym = unconnected, unrelated, irrelevant

1. Departing from the most direct way; circuitous; roundabout (adjective)

Root VIA = way

2. Subject to changing one's mind without much thought; erratic; whimsical (adjective)

Root CAPER = goat

3. Thought of apart from concrete realities, specific objects or actual instances (adjective)

Root TRACT = to draw

4. Having the appearance of truth, reliability or reason (adjective)

Root PLAUD = to applaud

5. Ability to perceive something obscure or concealed; discriminating (adjective)

Root CERN = to distinguish

6. Relevant; relating directly and significantly to the matter at hand (adjective)

Root TIN-TEN = to hold, keep



GREEK MYTHOLOGY WORDS

aegis, Amazon, ambrosia, aurora, calypso, chimerical, Delphic, draconian, epicurean, fauna, flora, gorgons, halcyon, harpies, Herculean, hermetic, hydra, iridescent, labyrinth, laconic, lethargy, lycanthrope, martial, meander, mentor, mercurial, museum, narcissism, nectar, nemesis, odyssey, palladium, panacea, platonic, procrustean, Promethean, protean, sibylline, siren, sophistry, stoical, stentorian, tantalize, zephyr

1. Sponsorship or auspices; shield or breastplate (noun)
Mythology = ZEUS & ATHENA
2. Exhibiting luxurious taste or habits. esp. in food and drink (adjective)
Mythology = EPICURUS
3. A wise or trusted adviser or counselor (noun)
Mythology = ODYSSEUS
4. Wildly fanciful; imaginary; highly unrealistic; foolish (adjective)
Mythology = CHIMERA
5. Intricate structure of interconnected passages from which it is hard to exit; a maze (noun)
Mythology = MINOTAUR
6. A building where works or art and scientific specimens are kept and displayed (noun)
Mythology = MUSES
7. Inordinate fascination with oneself; excessive self-love; vanity (noun)
Mythology NARCISSUS
8. A long, wandering journey full of trials and adventures; a spiritual quest (noun)
Mythology = ODYSSEUS
9. To follow a winding or tortuous course; to wander aimlessly or idly (verb)
Mythology = MENDERES River
10. Seemingly indifferent to pleasure or pain; impassive; austere fortitude (adjective)
Mythology = STOCISM & ZENO
11. A gentle breeze; a piece of light weight clothing (noun)
Mythology = ZEPHYRUS
12. Extremely extensive, intense or difficult; of extraordinary strength or size (adjective)
Mythology = HERCULES
13. Brief, pithy, concise or terse; using very few words (adjective)
Mythology = LACONIA



NSF - VOCABULARY



Numbers



Whole Number Counting.

I'm sure that you know how to spell the numbers from one through one hundred, but let's do a quick review of the basic counting forms in English before we move on to the Latin and Greek forms. You may also pick up a rule or two that you weren't sure about before.

I. The numbers 1 through 10 are pretty straightforward, and I'm assuming that you've learned them or are learning them now.

1	one	6	six
2	two	7	seven
3	three	8	eight
4	four	9	nine
5	five	10	ten

II. When you form the teen form of the word, the number above plus ten, there is a rule but some unexpected forms also show up. Here are the straightforward ones:

14	four + ten	=	fourteen
16	six + ten	=	sixteen
17	seven + ten	=	seventeen
19	nine + ten	=	nineteen

These four were easy! You just add -teen to the original number to make the new form!

What about all the others?

11	one + ten	=	eleven
12	two + ten	=	twelve
13	three + ten	=	THIRteen
15	five + ten	=	FIFteen
18	eight + ten	=	EIGHteen
and 20	two tens	=	twenty

III. When we get into the twenties and beyond, things get a lot easier! All you do is add the unit number on the end of the tens number.

Remember that these numbers should be hyphenated, unlike the numbers that came before!

21	twenty-one
22	twenty-two
23	twenty-three and so on!



Processing Information	<i>You've just covered a lot of information. Please fill in the first three columns of the Number Tables on pages 7 and 8 to keep track of what you just learned.</i>
-------------------------------	---

Practice!

Use what you just learned do the following problems. Feel free to use a calculator if you like, but make sure to spell out your entire answer without looking back at the previous page.

A. Cathy and Bob are now old friends. When they met, Cathy was seven, and Bob was four years older.

- 1) How old was Bob when he and Cathy met? _____
- 2) How old was Cathy when Bob was seventeen? _____
- 3) They met in 1998. How will Cathy be in 2006? _____
- 4) How old will Bob be in 2006? _____
- 5) How long have Bob and Cathy been friends? _____

Identifying problem areas:

List the whole number words that you are most likely to misspell in the box below:



Number References

We often use numbers as references to indicate which object in a list or group we're talking about.

For instance, let's say that you drew a picture in art class, but you didn't like how it turned out. You might erase that draft and do a second version. When you get done with that second draft, you may decide that you liked the first drawing better, erase the second draft, and give it a third try.

So, you can see how helpful numbers are for referring to things that don't have individual names. It's a good idea to keep track of these numbers!

Practice

Try to name all the reference forms for these numbers. The first three, which show up the box above, are already filled in. How many of the rest do you know?

Number	Reference Form	Number	Reference Form
1	First	9	
2	Second	10	
3	Third	11	
4		12	
5		13	
6		14	
7		15	
8		16	

The answers are in the index, but don't check them until you've given this exercise your best try!

**Processing Information**

Take a highlighter and underline the endings of all of the reference forms on the previous page. Do you see any patterns?

Great work! If you followed the prompt above, you will have noticed that, for almost all the words in the table above, the reference form is made simply by adding _____th to the end of the regular number!

Which numbers are the exceptions? Write the 6 exceptions in the box below.



Processing Information	<i>To help you remember the rule you just learned, fill in the reference column of your Number Tables on pages 7 and 8.</i>
-------------------------------	---

Fractions and Actions

In addition to indicating the position in a list of an item being referenced, a number can also be used to indicate an action or a fraction of a whole.

A. Fractions

A fraction is a part of a whole. So, if you only do a fraction of your homework, you're not done yet! Fractions are pretty easy to show with numbers, as you can see in the table below, but their spellings require a little more attention. If you already know how to spell the names of the fragments, fill in as much of this table as you can. A couple are already filled in for you.

No.	Spelling	No.	Spelling	No.	Spelling
$\frac{1}{2}$	one half	$\frac{1}{8}$		$\frac{1}{14}$	
$\frac{1}{3}$	one third	$\frac{1}{9}$		$\frac{1}{15}$	
$\frac{1}{4}$	one fourth	$\frac{1}{10}$		$\frac{1}{16}$	
$\frac{1}{5}$		$\frac{1}{11}$		$\frac{1}{17}$	
$\frac{1}{6}$		$\frac{1}{12}$		$\frac{1}{18}$	
$\frac{1}{7}$		$\frac{1}{13}$		$\frac{1}{19}$	



Processing Information	<i>Highlight the endings of the fraction forms. How do they compare to the reference forms? Write the one different example in the box below.</i>
-------------------------------	---

Fractions don't just occur one at a time; sometimes we might eat three pieces of a pie, which was cut into eighths. How much of the pie was eaten?

Three eighths.

From this example you can see that that the plural form of a fraction (when there's more than one) can be made by adding -s to the end of the fraction form of the number.

Examples: third \longrightarrow thirds
 fourth \longrightarrow fourths

Rule: add -s to the end of a fraction form to make its plural. Exception: half becomes halves

Practice! Write out the names of the following fractions. Two examples have been filled in for you.

No.	Spelling	No.	Spelling	No.	Spelling
$\frac{2}{17}$	two seventeenths	$\frac{12}{13}$		$\frac{5}{6}$	
$\frac{5}{13}$		$\frac{4}{5}$		$\frac{15}{16}$	
$\frac{9}{27}$	nine twenty-sevenths	$\frac{19}{17}$		$\frac{8}{9}$	
$\frac{32}{97}$		$\frac{2}{3}$		$\frac{33}{34}$	

The answers are in the index, but don't check them until you've given this exercise your best try!

Identifying problem areas:

List the fractions that you are most likely to misspell in the box below:



B. Actions

Some fractions are used to indicate an action that is taking place.

For example, you might halve the homework you have to do tomorrow night by doing part of it tonight. Or you might have heard of being “drawn and quartered,” a medieval torture technique.

Those are really the only two fractions used to describe actions.

Processing Information	<i>You've just gone over a great deal of information, and even if it is familiar, it's a good idea to put it all together. Fill in the tables below and they'll be a good reference for you!</i>
-------------------------------	--

NUMBER TABLE

No.	Name	Reference Form	No.	Fraction Form
1			--	
2			$\frac{1}{2}$	
3			$\frac{1}{3}$	
4			$\frac{1}{4}$	
5			$\frac{1}{5}$	
6			$\frac{1}{6}$	
7			$\frac{1}{7}$	
8			$\frac{1}{8}$	
9			$\frac{1}{9}$	
10			$\frac{1}{10}$	
11			$\frac{1}{11}$	



12			$\frac{1}{12}$	
13			$\frac{1}{13}$	
14			$\frac{1}{14}$	
15			$\frac{1}{15}$	
16			$\frac{1}{16}$	
17			$\frac{1}{17}$	
18			$\frac{1}{18}$	
19			$\frac{1}{19}$	
20			$\frac{1}{20}$	
21			$\frac{1}{21}$	
22			$\frac{1}{22}$	
23			$\frac{1}{23}$	
24			$\frac{1}{24}$	
25			$\frac{1}{25}$	
<i>Now you're ready to get started on the Greek and Latin numbers!</i>				



Greek and Latin Numbers

In English, Greek and Latin numbers are very commonly used. We use the Greek and Latin forms for combining with other words. They are the combination forms of the numbers.

Regular	Combination Form	Combination forms crop up in all sorts of places, and once you get to know these numbers, you'll get pretty good at spotting them! For now, we're going to practice each one separately, and then we'll see how useful knowing these forms is!
One	Uno, uni, mono	
Two	Duo, di, bi	
Three	Tri	
Four	Quadr	
Five	Penta, Quinqu	
Six	Hexa	
Seven	Septa, Hepta	
Eight	Nona	
Nine	Nona	
Ten	Deca	
Half	Semi, Hemi	

Practice!

Let's see how many words we can come up with that use the combining form for the number one.

What is a vehicle that you can ride that only has one wheel? _____

What is a special eyeglass that you wear only over one eye? _____

What is the one big thing that all of the solar systems are contained in? _____

If 'lateral' means 'to the side' or 'side', what do you think 'unilateral' means? _____

How many people do you think it takes to make a unilateral decision? _____

What are the outfits called that all the kids at some schools have to wear? _____ (one outfit)

What is it called when someone speaks in the same boring tone of voice? _____ (one tone)

The answers are in the index, but don't check them until you've given this exercise your best try!



Processing Information	<i>Okay, it's time to put it all together for the number one. Fill the table below to keep track of what you have learned so far!</i>
-------------------------------	---

No.	Combination forms	Example words
1		

Okay, now we're on to the number two! Try to answer the following questions, all of which have to do with the combining forms for the number two. Some of the answers are difficult to think up, so there's a word bank provided to help you with the first three problems.

Practice!

What do you call a musical pair? _____

What is a vehicle that you can ride that has two wheels and pedals? _____

What is an object that has two lenses, which you can use to see things that are far away? _____

If lateral means 'to the side' or 'side', how many sides are there to a bilateral conversation? _____

If sect means 'to cut' or 'pieces', what does it mean to bisect something? _____

Word Bank:			
duo	bio	diet	tricycle
bicycle	monocle	binoculars	glasses



Processing Information	<i>Good work getting through the combining forms for the number two. Jot down what you learned in the table below.</i>
-------------------------------	--

No.	Combination forms	Example words
2		

Good work! We've covered the combining forms for numbers one and two so far. You know what's coming up: the practice for number three! There's a word bank provided for some of the tougher questions in this section, too, but there are some trick words included!

Practice!

What do you call a thing that you can ride that has three wheels? _____

The root 'pod' means 'foot' or 'feet'. What do you call the thing that you can rest a camera on that has three feet?

'Lingual' means 'able to speak'. What do you call someone who can speak three languages?

What's the name for a shape that has three sides and three angles? _____

'Dent' means 'tooth' or 'teeth'. What could we call a weapon that has three teeth or tines?

What word could we use to describe something that is made up of three colors?

If you have one, it's a single. If you have two, it's a double. What do you have, if you have three?

Word Bank:				
triple	trial	tree	tricycle	triangle
bicycle	truth	trident	square	trilingual
tripod	three	tricolor	pizza	trombone



Processing Information	<i>That's a wrap on number three! Great job. Fill in the table below to keep your notes organized!</i>
-------------------------------	--

No.	Combination forms	Example words
3		

Are you starting to think of other words that use the combining forms that we've been looking at? Use the word bank if you need to, but remember that not all of the words given are answers!

Practice!

What do you call a section of a map that has been divided into four parts? _____

What is another word for one fourth of something? _____

If you have one, it's a single. If you have two, it's a double. Three makes triple. What do you have, if you have four? _____

'Ped' means 'foot' or 'feet'. What could you call an animal that has four feet? _____

What would you call a shape with four sides or four angles? _____

Word Bank:				
quad	quarter	quadrangle	quadruped	quasi
quake	quail	quilt	square	quince



Processing Information	<i>Well done getting through those problems. What did you learn about the combining form for number four?</i>
-------------------------------	---

No.	Combination forms	Example words
4		

Ready for the next set of problems? See how many of these you can answer without using the index to check your answers. Don't get tricked by the word bank!

Practice!

What do you call five twins? _____

What is the name for the important military building in Washington, D.C., that has five sides?

If a 'centenary' is a celebration after 100 years, what is a celebration after five hundred years called?

If a troupe of two musicians is called a duet, what is a troupe of five musicians called?

One is single, two is double, three is triple, and four is quadruple. What is five? _____

Word Bank:				
triplets	quintuplets	pentagon	octagon	quasi
quintet	quail	quilt	quintuple	quince



Processing Information	<i>We're about halfway done! Make sure you track your notes in the table below. You're going to want these notes for an upcoming activity!</i>
-------------------------------	--

No.	Combination forms	Example words
5		

We're on to the problems for the combination forms for the number six. We're about halfway done with the number combination forms, and then you'll get to do some fun activities that will help you to remember how to spell words that use these combination forms.

Practice!

What do you call six twins? _____

What is the name for a shape that has six sides? _____

If a quinquagenarian has lived for fifty years, and a quadragenarian has lived for forty years, what do you call someone who has lived for sixty years? _____

'Pod' means 'foot' or 'feet'. What is another name for insects that have six feet? _____

A group of three is a triad, and a group of five is a pentad. What is a group of six? _____

Word Bank:				
quadruple	hexad	pentagon	hexapod	quasi
hexagon	quail	hexagenarian		quince



Processing Information	<i>Here's a question: September is now the ninth month of the year. Which month was it originally? How do you know? Put your notes in the box below.</i>
-------------------------------	--

No.	Combination forms	Example words
7		

You should have noticed patterns having to do with the following types of words: shapes, sizes of groups, number of parts like wheels or feet, number of years lived, etc. These next ones should be pretty easy, so try them without a word bank!

Practice!

What do you call eight twins? _____

What is the name for a shape that has eight sides? _____

If a quinquagenarian has lived for fifty years, and a quadragenarian has lived for forty years, what do you call someone who has lived for eighty years? _____

A group of three is a triad, and a group of five is a pentad. What is a group of eight? _____

What is the name for a group of eight musicians? _____

How many legs does an octopus have? _____

What is another name for an insect that has eight legs (like a spider!)? _____

You can check your answers by looking in the index, but don't do that until you've given this exercise your best effort!



Processing Information	<p><i>Try this one: October is now the tenth month of the year. Which month was it originally? See if you can find out why the months aren't in the correct places anymore before you get to page _____</i></p> <p><i>Put your notes on the number eight in the table below.</i></p>
-------------------------------	--

No.	Combination forms	Example words
8		

There's no word bank for the problems for number nine, but you're probably an expert on these number combining forms by now!

Practice!

What do you call nine twins? _____

What is the name for a shape that has nine sides? _____

If a quinquagenarian has lived for fifty years, and a quadragenarian has lived for forty years, what do you call someone who has lived for ninety years? _____

A group of three is a triad, and a group of five is a pentad. What is a group of nine? _____

You can check your answers by looking in the index, but don't do that until you've given this exercise your best effort!



Processing Information	<i>Try this one: October is now the tenth month of the year. Which month was it originally? See if you can find out why the months aren't in the correct places anymore before you get to page _____ Put your notes on the number eight in the table below.</i>
-------------------------------	---

No.	Combination forms	Example words
9		

We're almost at the end of learning our number combination forms! Do your best at these next exercises, and pretty soon we'll be on to some fun activities.

Practice!

What do you call ten twins? _____

What is the name for a shape that has ten sides? _____

If a quinquagenarian has lived for fifty years, and a quadragenarian has lived for forty years, what do you call someone who has lived for one hundred years? _____

What do you call a series of ten years, like the 1930s or 50s? _____

What do you call the period that stands between the units and the tenths places in a number, like in "1.5"? _____



Processing Information	<p><i>This is the last one of these questions because we've run out of months: what month was originally the tenth? How many months must have been added? Can you figure out which ones?</i></p> <p><i>Don't forget to put your notes on the number nine in the table below.</i></p>
-------------------------------	--

No.	Combination forms	Example words
10		

This next set of problems is our final set before we get into the fun puzzle. The following questions will help you to answer questions about the combination forms for $\frac{1}{2}$, and this set has a word bank!

Practice!

What is the name for chocolate that is only partly sweet? _____

What is the term that describes an object that is halfway between being liquid and solid?

What is the term for half of the globe? Sometimes, we talk about the northern or southern

What is the term for half of a circle? _____

What do you call the game that comes right before the final game in a tournament? _____



Processing Information	<p>Fill in the table below with information about the combination forms for half.</p> <p>Answer the questions below the table to help you to keep track of the other patterns you might have noticed over the course of the exercises you have done in this section.</p>
-------------------------------	--

No.	Combination forms	Example words
$\frac{1}{2}$		

Review the Patterns!

- 1) The combination form –agenarian is added on the end of a number combination form to show how long a person has lived. Fill the following blanks for review:

- 20 duagenarian
- 30 _____
- 40 _____
- 50 _____
- 60 _____
- 70 _____
- 80 _____
- 90 _____
- 100 _____

- 2) There are two combination forms that have to do with shapes, -angle and –gon.
The two that use –angle (which means ‘having angles’) are _____ and _____.
(find the answers in the exercises on the previous pages)

What are the names of the shapes having the following number of sides? Remember to use the –gon combination form.

- 6 _____
- 7 _____
- 8 _____
- 9 _____
- 10 _____



3) There are terms for groups of people, of course

- 2 duet
- 3 _____
- 4 _____
- 5 _____
- 6 _____
- 7 _____
- 8 _____

Another kind of group that is often referred to in a special way is twins.

- 2 twins
- 3 triplets
- 4 _____
- 5 _____
- 6 _____
- 7 _____
- 8 _____ You get the idea!



NSF - VOCABULARY



Shape, Size and Amount



Shape, Size, and Amount

Now that you’ve mastered many of the ways in which numbers and number combination forms can be spelled, you’re ready to get into some other mathematical terms. These terms are a great place to start with our spelling and vocabulary development because they are very common, and because you will definitely be using these words over the course of your education!

We’re going to start by looking at some common names for shapes, and then we’ll do some practice!

Shape	Combination Forms
Line	Lin(e) or Gram
Three sides	Triangle
Four sides	Rectangle, Square, Paralellogram, Trapezoid
Five sides	Pentagon
Six sides	Hexagon

We’ve already covered most of this pattern, so you should remember it. If you are having a hard time remembering some of the number forms, you should take a minute to follow the instructions below.

Study Pointer!

There’s really not much point to making flash cards for words you already know. Just make flash cards for the words, combination forms, and terms that you are having a hard time remembering.

You should shuffle your flash cards every time you use them so that you don’t just memorize the words in a certain order. The sample cards on the next page will give you an idea of what sort of information to put on your flash cards.



Sample Flash Cards

Let's say that a student wants to get better at remembering the combination form for the number seven, hepta-. She is having a difficult time because it's a lot like the combination form for six, hexa-. Here's a sample card that she should make to help her study this term.

The best way for this student to study is to mix this card in with other words that are proving challenging for her. She should not include words that she is comfortable with already because that would only prove confusing.

HEPTA-

Front

Meaning: SEVEN
Related forms: SEPTA-
Words: Heptuplets, September

Back

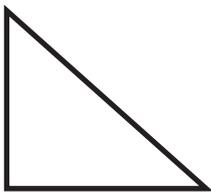
Take some time to decorate these cards with pictures, but try not to color them; you want to avoid giving yourself clues!

Study the cards by looking only at the fronts or the backs of the cards and trying to recall the information on the side you cannot see. Check your answers as you go. Then, have someone else quiz you.

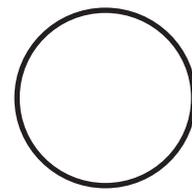
Now, on to our shapes!

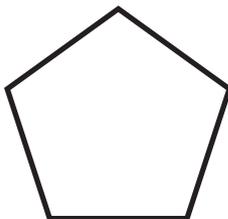
Common names

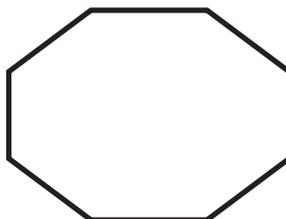
You probably already know some shape names, so please write the names inside of the shapes.

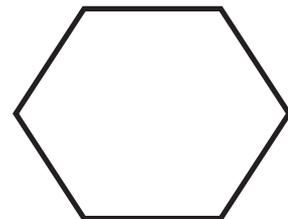








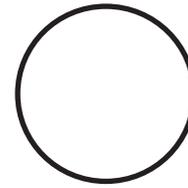




Let's stop and look at these shape names, because there are some interesting patterns here.

A **circle** is probably one of the first shapes that you learned about, and it is one of the easiest to spot in our everyday environment.

The type of **circle** that we have all probably seen is the **circle** of a wheel, on a car, bicycle, truck, or other vehicle. That sort of circle can be called a **-cycle**, as in a bicycle or a motorcycle.



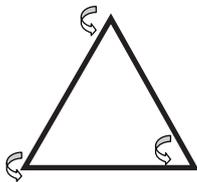
Summing Up

A flat, perfectly round shape is a **circle**, and if you're describing an object as looking like a circle, you call it **circular**.

If you are referring to a wheel shape, you can call it a **cycle**, and in the descriptive form, you say an object is **cyclical**.

Processing Information	Circles and cycles are a very common sort of shape, and they show up in all sorts of larger words keep track of what you just learned in the box below.
-------------------------------	---

Shape	Shape names	Different forms
	1) 2)	1) 2)



Summing Up

A **triangle** is a shape made up of three angles, one on the inside corner of each point of the triangle.

We already know that **tri-** is the combination form for three, so the name **triangle** makes a great deal of sense!

So, when you refer to a flat shape with three sides, it is a **triangle**.

If you are describing an object as looking like that shape, you call it **triangular**

Processing Information	Keep track of everything you just learned by jotting it down in the box below. You'll want to remember why shapes are given their names and how the different forms of the word are spelled
-------------------------------	---

Shape	Shape names	Different forms
	1) 2)	1) 2)

You would think that a **rectangle** was a shape with four angles, but **rect-** does not mean four! So, what could rectangle really mean?

Well, **rect-** actually means 'right', so a rectangle is a shape made up entirely of right angles, or **square** edges. This, of course, means that a square is a kind of **rectangle** because it, too, has all right angles.

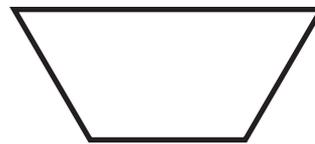


So, when you refer to a flat shape with four sides, it is a **rectangle**. If you are describing an object as looking like that shape, you call it **rectangular**.

Summing Up

A **square** is a kind of **rectangle** that has four sides of the same length.

There are other kinds of shapes that have four sides! Take a look at the ones below:



These aren't squares, are they? Are they rectangles? No, they can't be! They don't have right angles.

The shape on the left has four sides, and four angles, but they aren't all the same size. What's interesting about it though, is that its opposite sides are parallel, which means that they are pointed exactly in the same direction, and are always the same distance apart from each other.

This shape has parallel lines. Look back at the table with the shape names on page 1 of this section. Can you guess the name of this shape?

This shape is also quite interesting. It has two parallel sides, the top and the bottom, but the two sides are not parallel. The angles are not right angles, either. So, this one is not a rectangle, a parallelogram, or a square!



This is a very interesting shape called a trapezoid, which I like to remember as looking like a trap.

So, when you refer to a flat shape with four sides, it is a **parallelogram**. If you are describing an object as looking like that shape, you call it **trapezoid**.

Summing Up

These two shapes are different from **squares**, which are a kind of **rectangle**.

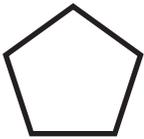
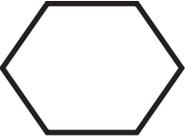
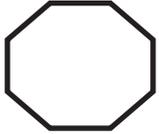


Processing Information	There are four different shapes and two forms of those shape names for you to remember in this section. Keep track of all of that information below!
-------------------------------	---

Shape	Shape names	Different forms
	1) 2)	1) 2)
	1)	1)
	1)	1)
	1)	2)

Five-sided figures and on follow a very specific pattern. All you have to do is add –gon on the end of the number combination forms!

Fill in the following table for practice making shape names:

Shape	Combination	Shape name
	_____ + gon	
	_____ + gon	
	_____ + gon	



Now, what about shapes that are less recognizable?

What are the names of the following shapes? Try to fill in the answers without using the table in the number chapter.

Number of Sides	Combination	Shape Name
9 sided shape	_____ + gon	
10 sided shape	_____ + gon	

Processing Information	Remember, we have only covered FLAT shapes so far: three-dimensional figures are up soon. We're going to take a break from shapes first and talk about lines!
-------------------------------	---

The combination forms for line are "gram" and "lin(e)". There are many words that are made with this combination form. Take a look at the words below. Can you figure out what these words have to do with "lines"?

- | |
|---|
| <p>Diagram</p> <p>Pentagram</p> <p>Telegram</p> <p>Monogram</p> |
|---|

Well, let's see if we can pull these words apart (or "parse" them) to see what they have to do with lines.

1) DIAGRAM

A diagram is a drawing that explains how something works. If you've ever seen a diagram, you'll know it looks something like this:

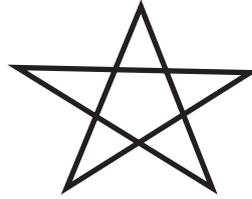


The parts of the diagram that are most helpful are the little lines that are drawn to the explanations of the parts. You see, the diagram is really the little lines that connect the picture to the explanations. In fact, the prefix "dia" means across, so a diagram is the lines that are drawn over an image that show what the parts are.



2) PENTAGRAM

A pentagram is a five-pointed star. Here's a picture of a pentagram:



It's probably pretty easy to see why this figure is called a pentagram: it's made up of 5 lines! Penta + gram = pentagram

3) TELEGRAM

A telegram is a short message that could be sent by teletyping over phone lines. It was a way to communicate quickly over short distances a long time ago. This was, of course, way before the day of instant messaging over the internet or text messaging to people's cell phones! So, if tele means distant, we can guess that a **tele + gram = telegram** is a line or message that came across a great distance.

4) MONOGRAM

People monogram many different things: watches, towels, and even backpacks and iPods can be monogrammed. Monograms are the brief identifying initials or messages that someone might put on a gift or on one of their prized possessions. Monograms identify the person who owns the object, the person who gave the gift, or the occasion on which the item was given. Usually, monograms are pretty brief. Since we already know that mono means one, we can guess that a mono + gram = monogram is a note or identifying message, usually one line long.

Good job! Now, we're ready to move on to our main three- dimensional shapes:

<p>This shape is like a stack of circles. It's the same shape as a can, or a tube. This shape can be thinner or wider, shorter or taller, but it must be circular on the ends. It's called a cylinder.</p>	
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Can you recognize any familiar parts in the word **cylinder**?

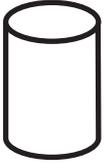
You should have noticed that the CY in cylinder is like the cy in cycle, which means 'circle'. The LIN should have reminded you of lin(e), which means 'line'.

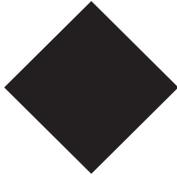
Does the name CYLINDER now make sense for this shape? Remember, it looks like a stack (or a line) of circles!

Summing Up

We've just learned that the shape of a can or a pipe is called a **cylinder**. If you are describing an object as looking like that shape, you call it **cylindrical**.



Shape	Shape names	Different forms
	1) 2)	1) 2)



What are all of the names that you can think of for this shape? List them below:



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Greek Latin Roots



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- ad to, toward admit
- aero air, aeroplane
- amo love amiable
- an, un not undo
- anthro man anthropology
- anti against antibiotics
- aqua water aquarium
- aud hear audience
- auto self automatic
- astro star astronaut
- bi two bicycle
- biblio book bibliography
- bio life antibiotic
- card heart cardiac
- carn meat, flesh carnivorous
- chron time chronic
- cide,ciss cut, kill pesticide
- circu around circumference
- claus, clud, clos closed exclude
- cogn know recognize
- contra against contradict
- corp body corpse
- cred believe credit
- crat, crac government democracy
- cyber direct, guide cyberspace
- dent, dont teeth dentist
- derm skin epidermis
- deus God divine
- di two dissect
- dict speak dictionary
- dyn power dynamic
- ecos, oikos house ecology
- eg I ego
- epi on top epipen
- eu happy, good euphoria
- ex out exit
- extra over, above extraordinary
- fid faith confident
- fin end definite
- gen begin generation
- gig giant gigabyte, gigantic
- glot,gloss tongue glossary
- gno, gni know agnostic
- graph,gram write paragraph
- hemi half hemisphere
- hetero different heterogenous
- hex six hexagon
- homo same homogenized
- homo man homo sapiens
- hum to bury, humus
- hydr water hydrate
- hyper over hyperactive
- hypo under hypochondriac
- inter between international
- intra within intramural
- kil thousand kilogram
- lingua tongue language
- log word, study logic (see ology)
- lux,luc light luxury
- mal bad normal
- mania crazy pyromaniac
- man hand manufacture
- mar sea marine
- mega great, large megabyte
- meter measure thermometer
- metro city or state Metropolis
- micro very small microscope
- mil 1,000 million, mile
- mini small minimum
- mis bad misbehave
- mit,miss send mission
- mob, mot, mov move mobile
- mono one Monopoly
- mort death immortal
- multi many multiply
- nano small iPod nano
- nat birth natural
- naut, nav sail navy
- nov nine November
- nova new Nova Scotia
- oct eight octagon
- -ology,log study of zoology
- omnia all omnivore
- pan bread pancake
- pan all company
- pax,pac peace Pacific Ocean
- ped,pod feet pedal
- ped, paed child pediatrician
- pent five pentagon
- pen tail depend
- phil love Philadelphia
- phobia fear arachnophobia
- phon sound telephone
- photo light photography
- phyte little plant neophyte
- poli city, state politics
- poly many polygon
- port carry transport
- poss, pon put, place postpone
- post after postpone
- pre before preteen
- pro for, forward protect
- pyr fire pyromaniac
- rupt break disrupt
- scio know omniscient
- scope see telescope
- scribe,script write describe
- semi half semi-sweet
- sinistra left sinister
- son sound sonic
- somn sleep insomnia
- soph wisdom philosophy
- spec look at spectacular
- sta,sti,stu stand standard
- stella star stellar



- sub under submarine
- super over Superman
- tab, taph table tablet
- tele far away telescope
- tetra four Tetris
- theo god theology
- twe, twi two twice
- tort twist, turn torture
- tox poison toxic
- trans across translate
- tri three triple
- vis,vid see video
- vita,viva life vital
- volu wish volunteer
- xeno strange xenophobic
- zoa animal zoology

Suffix	Meaning
-ion, -tion, -cion, -sion	The condition of what is described in the prefix and root. A suffix that turns adjectives or verbs into nouns or objects. eg. Decide + sion = decision Inject + ion = injection Substitute +ion = substitution
-ist, -ian, -arian	a person who performs the task described in the root and prefix. Makes specific nouns. eg. art + ist = artist library +ian=librarian piano +ist = pianist clinic +ian = clinician tour + ist = tourist
-ism	the concept of whatever is described in the root or prefix. Makes abstract nouns. eg. pessimist + ism = pessimism communist + ism = communism
-cy	the state or condition of being the way that is described in the root and prefix. Turns adjectives into nouns. eg. democrat +cy = democracy obstinate + cy = obstinacy
-ize	Able to do what is described in the prefix and root. A suffix added to nouns and adjectives to make them into verbs. eg. revolution + ize = revolutionize sensitive + ize = sensitize
-ary	having the property or trait described in the root or prefix. Turns nouns into adjectives eg. compliment + ary = complimentary honor + ary = honorary



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-ic, -ish	having the property or trait described in the root or prefix. Turns nouns into adjectives eg. meter +ic = metric son + ic = sonic tox +ic = toxic
-ate, -ile, -ite	having or doing what is described in the root and prefix. Turns nouns into adjectives and adjectives into verbs eg. complex + ic +ate = complicate regular +ate = regulate dict + ate = dictate miss + ile = missile
-ar, -lar, -al	having the characteristic described in the root and prefix. vita +al = vital stella +ar = stellar astra + al = astral
-less	without the characteristic described in the rest of the word. Adjectival ending rest +less = restless
-ject	to throw something. eg. in + ject = inject re + ject = reject sub +ject = subject





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