

Course Descriptions

Language Arts:

Students will grow in their knowledge and understanding of the English language through the study of grammar, vocabulary, and spelling. Daily practice will ensure the student's progress in learning spelling tips and tricks, including the spelling of plurals and knowing the differences between homophones. Vocabulary is introduced through the daily reading and then practiced and reviewed. Word roots and related words are used to help students discover the meaning of new words. Students are tested weekly on spelling and vocabulary acquisition. Grammar is focused on learning the parts of speech and how to write proper sentences of varying structure. Students learn to identify subjects, predicates, and the objective case and will apply that knowledge to writing well-structured sentences with correct word choice. Mechanics such as capitalization and punctuation including hyphens, semicolons, quotation marks, and apostrophes are taught and practiced. Students will brainstorm for quality, specific words to use as well as learn to use similes and metaphors to add description to their writing. All of their work culminates in student-produced writing several times a week. Weekly editing exercises put their knowledge to use, and the students create a final draft of one of their written pieces each week. Students will produce both fiction and non-fiction works and will have the opportunity to read their work aloud in front of an audience.

Hebrew:

Students will learn Psalm 23 in Hebrew. They will be able to read, write, and speak it. Students will learn the grammar necessary to understand the sentence construction and how different endings change the meaning of the words. Students will uncover new insights into the passage by studying the original Hebrew text.

Science:

Students will discover new things as they explore the sciences of biology, physics, chemistry and earth science. In biology the students will study body systems including the endocrine and urinary systems. They will dig deep and learn about cell structure and organelles at work. They will understand plant classification systems and learn the characteristics of major groups of plant life, as well as fascinating facts of some specific animals. In chemistry students will explore solubility and chemical reactions. They will understand how everything is a chemical and how heat energy can be transferred through chemical processes. In physics students will study light, sound, electricity, friction, and the forces involved in flight. Newton's laws of motion and Joule's laws of energy will be explored. Simple experiments will expand students' understanding. In earth science students will learn about wild weather including earthquakes and volcanoes and about the differences between the types of clouds. Students will study landforms and rock formation. They will identify rocks as they study the rock cycle. Students will appreciate the greatness of a God who created all these marvelous things.

Social Studies:

Students will be inspired as they learn about great leaders and eloquent speakers. Students will learn of the struggle to overcome of those in the Civil Rights Movement and those fighting against apartheid. They will learn of Nobel Peace Prize winners and hear quotes from State of the Union Addresses. They will travel the globe as they find monuments to great people and events and as they find landmarks and landforms. They will follow the expansion of great empires. They will learn of the tragedy of Holocaust and the triumph of Christian missionaries who shared the gospel in the darkest of circumstances. Students will travel the seas with Vikings and pirates. They will learn about representative democracy, the branches of government, how laws are made, and will take part in the process. Students will learn of how God gifted great artists and composers as well as learn about some of man's great failings. Some of the topics include: ancient history in Africa, hair in culture, the Battle of Hastings, the Great Smog, biographies of scientists and artists, the Gutenberg Press, the history of the land of Israel, gold rush, swords and armor, Tiananmen Square, and celebrations, including the Jewish feasts. Students will be challenged to think, examine, and form opinions. Primary sources used in the lessons include maps, speeches, documents, photographs, censuses, and first-hand accounts.

Scope and Sequence Lists

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Memory Verses

Day 1

Psalm 23:1-2

The Lord is my shepherd I shall not want. He makes me lie down in green pastures; He leads me beside quiet waters.

Day 6

Psalm 23:3

He restores my soul; He guides me in the paths of righteousness for His name's sake.

Day 11

Psalm 23:4

Even though I walk through the valley of the shadow of death, I fear no evil, for You are with me; Your rod and Your staff, they comfort me.

Day 16

Psalm 23:5

You prepare a table before me in the presence of my enemies; You have anointed my head with oil; My cup overflows.

Day 21

Psalm 23:6

Surely goodness and lovingkindness will follow me all the days of my life, And I will dwell in the house of the Lord forever.

Review Weeks

Day 36

Luke 4:18

"The Spirit of the Lord is upon Me, Because He anointed Me to preach the gospel to the poor. He has sent Me to proclaim release to the captives, And recovery of sight to the blind, To set free those who are oppressed."

Day 41

Romans 1:16.

For I am not ashamed of the gospel, for it is the power of God for salvation to everyone who believes, to the Jew first and also to the Greek.

Day 46

Matthew 9:13

"But go and learn what this means: 'I DESIRE COMPASSION, AND NOT SACRIFICE,' for I did not come to call the righteous, but sinners."

Day 51

Proverbs 1:7

The fear of the Lord is the beginning of knowledge; Fools despise wisdom and instruction.

Day 56
Ephesians 2:8,9

For it is by grace you have been saved, through faith—and this not from yourselves, it is the gift of God—not by works, so that no one can boast.

Review Weeks

Day 71
Ephesians 1:7

In Him we have redemption through His blood, the forgiveness of our trespasses, according to the riches of His grace.

Day 76
Philippians 4:19

And my God will supply all your needs according to His riches in glory in Christ Jesus.

Day 81
Galatians 2:20

I have been crucified with Christ; and it is no longer I who live, but Christ lives in me; and the life which I now live in the flesh I live by faith in the Son of God, who loved me and gave Himself up for me.

Day 86
John 14:15

If you love Me, you will keep My commandments.

Day 91
Numbers 6:24-26

The Lord bless you, and keep you; The Lord make His face shine on you, And be gracious to you; The Lord lift up His countenance on you, And give you peace.

Review Weeks

Day 106
Exodus 20:3-5a
Commandments 1&2

You shall have no other gods before Me. You shall not make for yourself an idol, or any likeness of what is in heaven above or on the earth beneath or in the water under the earth. You shall not worship them or serve them; for I, the Lord your God, am a jealous God.

Day 111
Exodus 20:7
Commandments 3

You shall not take the name of the Lord your God in vain, for the Lord will not leave him unpunished who takes His name in vain.

Day 116
Exodus 20:8-10a
Commandment 4

Remember the sabbath day, to keep it holy. Six days you shall labor and do all your work, but the seventh day is a sabbath of the Lord your God;

Day 121

Exodus 20:12-15

Commandments 5-8

Honor your father and your mother, that your days may be prolonged in the land which the Lord your God gives you.

You shall not murder.

You shall not commit adultery.

You shall not steal.

Day 126

Exodus 20:16-17a

Commandments 9&10

You shall not bear false witness against your neighbor. You shall not covet your neighbor's house; you shall not covet your neighbor's wife or his male servant or his female servant or his ox or his donkey or anything that belongs to your neighbor.

Spelling

- 1 Israel, multiplied, increased, exceed
- 2 wisely, fight, mightier, join
- 3 storage, taskmaster, spread, rigorous
- 4 birthstool, vigorous, midwives, boys
- 5 Review
- 6 Levi, Pharaoh, Nile, wicker
- 7 because, wages, child's mother, Hebrews' children
- 8 labor, struck, offender, companion
- 9 Moses, foreign, heard, trough
- 10 Review
- 11 mountain, Jethro, marvelous, blazing
- 12 affliction, sufferings, spacious, honey
- 13 articles, heed, memorial, sacrifice
- 14 believe, listen, caught, stretch, grasp
- 15 Review
- 16 furthermore, leprous, restored, pour
- 17 eloquent, tongue, recently, deaf
- 18 Levite, Aaron, moreover, mouth
- 19 father-in-law, firstborn, perform, seeking
- 20 Review
- 21 celebrate, three days' journey, previously, lazy, heavier
- 22 quota, daily, yesterday, either
- 23 cried, straw, deliver, amount
- 24 odious, delivered, compulsion, sword
- 25 – 35 Review weeks
- 36 Almighty, groaning, bondage, establish (Egyptian)
- 37 redeem, cruel, unskilled, burdens (listen)
- 38 fathers' households, Reuben, thirty-seven, length (families)
- 39 married, according, desert, island (daughters)
- 40 Review
- 41 brother, judgments, heart, eighty-three (prophet)
- 42 sorcerers, Pharaoh's heart, miracle, secret (magicians)
- 43 stubborn, foul, vessels, reservoirs (station)
- 44 passed, hardened, guest, oxygen (concern)
- 45 Review
- 46 entreat, court, relief, majestic (destroy)
- 47 gnats, staff, could, language (earth)
- 48 present, flies, waste, yourselves (sign)
- 49 abomination, remained, supplication, eyes (command)
- 50 Review
- 51 distinction, horse, severe, definite (continue)
- 52 kiln, boil, soot, sore (sight)
- 53 plague, pestilence, founded, exalt (brought)
- 54 hail, continually, since, shattered (field)
- 55 Review

56 barley, flax, ripen, ruin (cease)
57 mockery, among, theology, strength (unknown)
58 humble, refuse, locust, evil (escape)
59 territory, settled, numerous, hurriedly (against)
61 – 70 Review weeks
71 divided, dries, chariots, pursuit
72 gratified, pursue, spoil, hurl
73 inheritance, motionless, sanctuary, reign
74 grumble, showed, regulation, disease
75 Review
76 twilight, quail, dew, excess
77 Sabbath, coriander, wafer, manna
78 quarrel, thirsted, sworn, utterly
79 welfare, rejoice, dealt, proudly
80 Review
81 wilderness, eagles' wings, holy, Sinai (possession)
82 consecrate, touches, lightning, tremble (garment)
83 furnace, quaked, cannot, break (ascend)
84 slavery, perceive, prolong, neighbor's house (distance)
85 Review
86 designate, surely, plainly, permanently (appoint - appointed)
87 owner, prematurely, property, confined (vengeance)
88 hire, condemn, double, guilt (donkeys)
89 cloak, interest, vintage, sorceress (pieces)
90 Review
91 sow, soil, mention, observe (unleavened)
92 confusion, adversary, obey, rebellious (fruitful)
93 sapphire, nobles, obedient, accordance (burnt)
94 legal, entered, instruction, consuming (approach)
95 – 105 Review weeks
106 twisted, engrave, chains, jeweler
107 inner, skillfully, woven, edge
108 mail, torn, pomegranate, turban
109 blemish, minister, flour, kidneys
110 Review
111 atonement, soothing, purify, ordination (lamb)
112 incense, testimony, fragrant, perpetual (opposite)
113 census, contribution, mix, bronze (die)
114 finest, spices, utensils, proportions (altar)
115 Review
116 furniture, woven, forever, refreshed (covenant)
117 delayed, fashioned, proclamation, peace (people)
118 writing/written, tablet, powder, dancing (descendants)
119 committed, gold/told, blot, calf (angel)
120 Review

- 121 cleft, compassion, proclaim, consider (presence)
- 122 graze, cloud, iniquity, obstinate (anger)
- 123 fearful, snare, smash, empty-handed (jealous)
- 124 during, night, Ten Commandments, shone (fruit)
- 125 Review
- 126 curtain, bread, basin, tabernacle
- 127 service, design, embroider, inventive
- 128 construction, stirred, issue, enough
- 129 rams' skins, goats' hair, dyed, board
- 130 – 140 Review weeks
- 141 – 180 Review activities

Vocabulary

- 1 exceed: to go beyond, to become greater than
- 2 depart: to leave or to deviate from the normal course
- 3 rigorous: demanding
- 4 vigorous: strong, healthy or active and full of energy
- 5 Review
- 6 cast: to throw out
- 7 pity: feelings of compassion, feeling sorry for what's happened to someone
- 8 offender: someone who did something wrong
- 9 dwell: to live in a place
- 10 Review
- 11 consume: to use up, to eat up, to completely destroy
- 12 affliction: the cause of pain or distress, or being in pain or distress
- 13 compulsion: being forced to do something or forcing someone to do something
- 14 grasp: to grab firmly
- 15 Review
- 16 restore: to bring something back to its normal condition
- 17 eloquent: clear and powerful in speech
- 18 fluently: the ability to do something smoothly and easily, especially speaking
- 19 impose: to force something on someone
- 20 Review
- 21 cease: to end, finish
- 22 quota: a fixed amount, refers to a minimum or maximum number of things
- 23 compel: to force or to urge strongly so that you can't refuse
- 24 compulsion: the act of forcing someone to do something or being forced to do something
- 25 Review
- 26 – 35 Review weeks
- 36 bondage: being a slave, the state of being in someone's else's forced control
- 37 despondency: depression, feeling deeply discouraged
- 38 aptitude: natural ability
- 39 banish: to get rid of someone or something; to send someone away as a punishment
- 40 Review
- 41 dread: great fear
- 42 conspicuous: obvious, stands out and attracts attention
- 43 obstinate: stubborn, not willing to change
- 44 foul: smelling awful, or morally wrong
- 45 Review
- 46 entreat: to plead, to ask in a very serious or emotional way
- 47 adamant: unwilling to change your mind about a decision or opinion
- 48 present: to show yourself, someone or something before others
- 49 supplication: a humble, sincere request
- 50 Review
- 51 distinction: a difference between things, or a separation between groups
- 52 ☒ kiln: an oven used for drying and hardening pottery.

- soot: what's left in the chimney after the fire burns down in the kiln. It's a black powder that is carbon left over after the chemical process of burning takes place.
- 53 regard: concern, or respect
- 54 shatter: to break into many pieces
- 55 Review
- 56 commence: to begin; antonym: cease
- 57 mockery: words or actions that make fun of someone or something in a mean way or the person or thing that's being made fun of
- 58 snare: trap
- 59 numerous: many, a great amount
- 60 Review
- 61 – 70 Review weeks
- 71 pursuit: the act of chasing
- 72 hurl: to forcefully throw something
- 73 redeem: to buy something back or to buy its freedom or to restore it or to make a situation better
- 74 earnest: very serious
- 75 Review
- 76 irate: very angry
- 77 gratify: satisfy, to give or do whatever is wanted
- 78 utterly: completely, totally
- 79 inquire: to ask
- 80 Review
- 81 holy: set apart, pertaining to God, perfect and pure
- 82 consecrate: to officially appoint someone as a priest or to officially designate something as holy
- 83 gaze: to look for a long time at something without looking away
- 84 perceive: to realize, to become aware of
- 85 Review
- 86 presumptuous: too confident in something so that you do something you don't have the right to do
- 87 vengeance: getting back at someone, doing something to hurt someone else because of what they did to you or to someone you care about
- 88 restitution: restoring something to its owner or paying for damage you caused
- 89 oppress: to treat someone or a group of people badly and unfairly for a long time
- 90 Review
- 91 leaven: to make something less serious often by adding some fun or humor to the situation
- 92 adversary: enemy, opponent
- 93 ordinance: law or decree
- 94 kindle: to start burning or to stir up excitement
- 95 – 105 Review weeks
- 106 scarlet: red
- 107 sporadic: happening at irregular intervals
- 108 engraving: a picture made from cutting a surface
- 109 blemish: something that makes someone or something imperfect
- 110 Review
- 111 ordination: the formal act of making someone a priest or minister

- 112 incense: to make extremely angry
- 113 ransom: amount paid to free someone who has been captured
- 114 atonement: the repairing of a relationship through making up for a wrong done
- 115 Review
- 116 perpetual: ongoing, not stopping
- 117 obstinate: stubborn, not willing to change
- 118 disperse: scatter, to separate into different directions
- 119 derision: the feeling expressed when you insult someone or make fun of them in a mean, mocking way
- 120 Review
- 121 compassion: desire to help someone in need
- 122 haste: acting quickly without stopping to think first
- 123 observe: to watch carefully
- 124 covet: to wish for what someone else has with envy
- 125 Review
- 126 fragrant: smelling nice
- 127 contribution: something given
- 128 restrain: to keep from doing something
- 129 designate: to set aside for a specific purpose
- 130 – 140 Review weeks
- 141 – 180 Review activities

Grammar

- 1 verb, adverb (describing adjectives), worksheet: correct sentences
- 2 verb, adverb
- 3 adjective
- 4 adjective
- 5 editing
- 6 action verb, worksheet: combining sentences, compound sentences, semicolon
- 7 noun, direct object, no comma with because, apostrophe to show possession
- 8 noun, prepositional phrase, object of a preposition, past tense
- 9 action verb
- 10 editing
- 11 verb, worksheet: comma after introductory clauses
- 12 noun, direct object, adverb, prepositional phrase, object of preposition
- 13 noun
- 14 verb, noun, direct object, pronoun
- 15 editing
- 16 verb, worksheet: rewriting complex sentences without commas
- 17 adjective
- 18 adverb
- 19 verb, action verb
- 20 editing
- 21 verb, worksheet: introductory phrases and clauses-commas
- 22 noun
- 23 verb
- 24 noun
- 25 editing
- 26 – 35 Review weeks
- 36 noun, proper nouns begin with capital letter, worksheet: appositives
- 37 prefix un, noun, appositive
- 38 noun, apostrophe-possessive
- 39 verb
- 40 editing
- 41 verb, worksheet: specific verbs
- 42 adjective, apostrophe-possessive
- 43 adjective
- 44 adjective, past tense
- 45 editing
- 46 action verb, (transitive verb), direct object, subject, predicate, simple predicate
- 47 adjective
- 48 verb, (transitive verb), direct object
- 49 noun, prepositional phrases, direct object
- 50 editing
- 51 noun, adjective, verb, worksheet: appositives, specific nouns and verbs

52 nouns
53 noun, direct object
54 verb, (transitive verb), direct object
55 editing
56 verb, worksheet: pronouns
57 noun, pronouns
58 noun, direct object, adjective
59 adverb, adjective
60 editing
61 - 70 Review weeks
71 noun, worksheet: adjectives (adjectives with commas and hyphens)
72 verb, direct object, adjective
73 verb
74 adjective
75 editing
76 adjective, worksheet: similes
77 verb
78 adverb
79 verb
80 editing
81 adjective, worksheet: metaphors
82 verb, direct object
83 verb
84 possessive noun, verb
85 editing
86 adverb, adjective, worksheet: practice with different types of description
87 noun
88 noun
89 verb, direct object
90 editing
91 verb, worksheet: commas
92 noun
93 noun, subject, predicate, direct object, introduction of indirect object
94 verb
95 editing
96 – 105 Review weeks
106 adjective, worksheet: using quotation marks
107 adverb, adjective
108 noun, verb
109 noun, verb, direct object, object of the preposition, prepositional phrase
110 editing
111 noun, worksheet: quotation marks, speech tags
112 noun, verb
113 noun, verb
114 noun

115 editing
116 adjective, adverb, verb, worksheet: indirect objects and object pronouns
117 adjective
118 verb, direct object
119 noun
120 editing
121 noun, worksheet: capitalization, commas, abbreviations
122 noun, direct object
123 verb
124 verb
125 editing
126 adjective, worksheet: "perfect" verb tenses
127 noun, pronoun
128 verb, helping verbs
129 verb, direct object, adjective, adverb, apostrophe (possession)
130 editing
131 – 140 Review weeks
141 – 180 Review activities

Hebrew

Pronunciation Guide:

- a as in “say ah” at the dentist
aa long a, as in day
e short e, as in red
ee long e, as in be
i short I, as in hit
ii long I, as in lie (In caps double ii looks like this, II.)
o long o, as in go
u long u, as in moo
r if you can, roll your R a little with a flicker of your tongue
kh Make the sound k. It’s in your throat. Try to make it deeper down your throat. Add a hard h sound, as in horse. It’s one sound. Practice making the k and h sounds together.
- 1 דוד David, Dalet, Vav, Dalet
2 מִיְהִלָּא eloHEEM, Aleph, Lamed, Hey, Yod, Mem (end form)
3 הוֹהִי yeHOva- God’s name, “the judging powers”
4 Adonai - Lord
5 Review
6 יֵרַע raAA, raEE – shepherd, my shepherd
7 Writing: The Lord is my Shepherd, yeHOva raEE
8 lo – not
9 Chet, find, write: KHOshekh, RUakh
10 Review, Resh, Vav, lo, Lord, shepherd
11 Learn and trace the Samech
12 Trace and write Samech
13 Learn khSAR, ekhSAR – want
14 אֵל רֹסַח אל רסח Write both words: lo ekhSAR
15 Review – The Lord is my shepherd, I shall not want.
16 Write Psalm 23:1.
17 DEshe – grass
18 pasture – na’AA, pastures – na’OT
19 in pastures of grass – beenOT DEshe
20 Review
21 Vav review: v, u, o
22 ו, נ, ב, א, ת, ד, שׁ
23 תּוֹאֲנֵב אֵשֶׁת Write beenOT DEshe.
24 will make me lie down – yarbiTZeene (imperfect)
25 – 35 Review weeks
36 in pastures of grass (he) will make me lie down – beenOT DEshe yarbiTZeene
37 rests – menuKHOT
38 waters – Mayim, upon – al
*39 מַיִם תּוֹחֲמִים waters of rests – maa menuKHOT
*40 Writing al maa menuKHOT

- 41 lead – neeHEL; will lead – yenaHEL (perfect, imperfect, neither in verse)
- 42 ינלהני will lead me – yenaHaLEnee
- *43 He will lead me upon quiet (still) waters – al maa menuKHOT yenaHaLEnee
- 44 Writing al maa menuKHOT yenaHaLEnee
- 45 Review Psalm 23:2 all together.
- 46 Trace and write Fey.
- 47 פפ Trace Fey, Pey
- 48 soul – NEfesh, my soul – nafSHEE
- 49 restored (perfect) – shoVEV, will restore or restores or is restoring (imperfect) – yeshoVEV
- 50 ישפן בבושי He restores my soul – nafSHEE yeshoVEV
- 51 Letters Qof and Sade
- 52 קדצ justice – TSEdek
- 53 ילגעמ circle – maGal, circles – magaLEEM, circles of – magLAA
- 54 Writing circles of justice
- 55 Review Psalm 23:1-3 (beginning).
- 56 hinkHAH – guide, showed the way; yanKHEH – will guide or shows the way; yanKHEnee – will guide me, shows me the way
- 57 he guides me in paths of righteousness – yanKHEnee ymagLAA TSEdek
- 58 name – shem; his name – shmo
- 59 for the sake of – leMAN
- 60 Put together Psalm 23:3.
- 61 – 70 Review weeks
- 71 valley – gAA
- 72 איגב Writing through the valley – beGAA
- 73 though – gam kee
- 74 walked – haLAKH, will walk (imperfect) – eLEKH (compare to want – khSAR, ekhSAR)
- 75 I will walk (imperfect) – eLEKH; he will walk – yeLEKH
- All together: gam kee eLEKH beGAA
- 76 death – MAVet
- 77 shadow – tsel; shadow of death – tsalMAvet
- 78 evil – ra
- 79 yaRA – I feared (perfect), eeRA – I fear, I will fear (imperfect)
- 80 Writing: in the valley of the shadow of death
- 81 I will not fear evil – lo eeRA ra
- 82 because – ki
- 83 you (woman) at, you (man) – aTA
- 84 with – Aeem, with me – iimaDEE
- 85 I will not fear evil because you are with me – lo eeRA ra ki aTA iimaDEE
- 86 rod – SHEvet, your rod – shivteKHA
- 87 staff – mishlInet (Those are two Is like the sound in lie.), your staff – mishanteKHA
- 88 they – HEmah
- 89 comforted – neeKHEM, will comfort (imperfect) – yenaKHEM, will comfort me – yenaKhaMUnee (Verb also shows who is doing it. This is the masculine “they” form.)
- 90 and – u, put it all together

91		enemy – tsoRER, tsoreREEM – enemies, my enemies – tsoreRII
92		before – lifNAA, before me – lefaNII, to my faces (plural)
93		prepared (perfect) – aRAKH, you will prepare (imperfect) - taaROKH
94		against – Neged, Think of this as positional, across from.
95		table – shulkHAN
96 – 105		Review weeks
106	נמש	oil – SHEmen, with oil – va SHEmen, נמשב
107	תנשד	oiled (perfect) – diSHEN, you oiled (perfect) – diSHANta
108	ישאר	head – rosh, my head – roSHEE
109		You anointed my head with oil. You oiled in the oil my head. in – va
110		Writing: diSHANta va SHEmen roSHEE
111		letter Kaf
112		cup – kos, my cup – koSEE
113	יסכ	Writing koSEE.
114	היור	overflowed – revaYAH, adjective, only used once in the Bible
115		Put it together. koSEE revaYAH, diSHANta va SHEmen roSHEE; koSEE revaYAH
116		only (surely) – akh
117	דסח	mercy (lovingkindness) – KHEsed
118	בוט	good – tov
119		and – va, Writing good and mercy.
120		Put it together with verse 5.
121		chase (follow) – raDAF (perfect), yirdeFU (imperfect), will chase me – yirdeFUnee
122	לכ	all – kol, also translates as any and every
123	יח	khaYEEM – lives (life only exists in plural), my life – khaYII (changes like my enemies)
124	ימי	day – yom, days – yaMEEM, days of my life – yeMAA khaYII (check to see if correlates to pastures of green others?)
125		Writing all the days of my life.
126		yaSHAV – dwelt, I dwelt – yaSHAVtee, in our verse – SHAVtee (all perfect)
127		Lord - Adonai
128		house – BAyit (almost sounds like exaggerated bite), Lord's house – baat Adonai in the Lord's house – be vet
129		length – Orekh
130		for length of days – le Orekh yaMEEM
131-140		Review weeks

Science

- 1 body system review, DNA (telomeres)
- 2 rates of population growth
- 3 brick making, chemical process (vitrification)
- 4 how to be vigorous
- 5 plague, immune system (white blood cells, antibodies)
- 6 reeds, plant classification (mono-, angiosperm)
- 7 bathing (eubacteria)
- 8 -
- 9 review: water cycle, water table, gravity, elevation, wheel and axle, simple machine, work, force
- 10 tears (endocrine system, hormones) *Opens the possibility of discussing body changes
- 11 fire magic tricks
- 12 milk (calcium)
- 13 honey (enzymes, chemical reaction, review of DNA, RNA, ribosome, protein)
- 14 unusual snakes, reptile review
- 15 finding and refining silver and gold (mining)
- 16 leprosy (dendrites, axons)
- 17 deafness, sound (cochlea)
- 18 how speech is formed (epiglottis, trachea, larynx-voice box)
- 19 donkeys
- 20 sound amplification
- 21 swords (copper, tin, bronze)
- 22 straw, parts of a plant
- 23 production line, assembly line
- 24 sight (photoreceptors, rods, cones, blind spot)
- 25 compulsion (dopamine, transmitter)
- 26 - 35 Review Weeks
- 36-40 WWII
- 41 heart (pulmonary)
- 42 our brains and how they play tricks on us, optical illusions
- 43 blood (red and white blood cells, plasma, platelets, bone marrow, hemoglobin)
- 44 fish of the Nile
- 45 amphibians, frogs (metamorphosis)
- 46 decomposition, decomposers, the fungus kingdom
- 47 gnats, insect review
- 48 flies
- 49 stones and rocks (sedimentary rock, sandstone, limestone)
- 50 metamorphic rock, igneous rock, rock cycle, rock identification
- 51 horses
- 52 white blood cells (lymph, lymph nodes)
- 53 hail (cumulonimbus)
- 54 thunderstorm, lightning
- 55 hurricanes
- 56 flax, barley, wheat, spelt (germinate)
- 57 tornadoes

58	locusts
59	wind (gust)
60	candles
61-70	Review
71	rate (velocity, acceleration)
72	polarity
73	trembling (fight or flight, adrenaline)
74	water treatment plants
75	water treatment
76	quail (migration)
77	worms (annelids)
78	Newton's Third Law of Motion
79	barbeque (Maillard Reaction)
80	displacement
81	lift (thrust, drag)
82	detergent (surfactants)
83	earthquakes (magnitude, seismograph)
84	cloud identification (cumulous, stratus, cirrus)
85	volcanoes (dormant)
86	tools and simple machines (awl, printing press)
87	teeth, review of eye (enamel)
88	Bernoulli's Principle
89	flight, hot air balloons
90	build flying machines
91	where oil comes from, chemistry review
92	levers (fulcrum)
93	precious stones, diamonds (transparent)
94	fog (dewpoint)
95	porpoise, dolphin (echolocation)
96-105	Review Weeks
106	colors in light, color of the sun and sky, light frequencies
107	minerals (agate, emerald, ruby, sapphire, diamond, turquoise, and others)
108	chain mail, arrows, and the forces at work
109	urinary system (homeostasis)
110	fat
111	plant and animal cells (organelles, mitochondria)
112	acacia trees (gymnosperm)
113	causes of disease (enzymes, genetic disorder)
114	heat (chemical, transfer of energy)
115	compound machines (gears)
116	perpetual motion (Newton's first law of motion)
117	friction (kinetic, static, inertia)
118	oceans (continental shelf, trench)
119	$F = ma$
120	viscosity
121	landforms
122	landforms
123	fear (amygdala)

124	bioluminescence (anglerfish)
125	symbiotic relationship
126	electricity (circuit)
127	tree identification
128	saturation (solvent, solute, solubility)
129	hair (follicles, keratin)
130	seeing color
131 – 140	Review Weeks
145 – 180	Review Activities

Science Explore More

- 1 Do you remember how DNA copies itself? If not, learn about DNA DNA reproduction, how it divides and copies itself. If that's something you know, then learn about the role of telomeres in cancer.
- 2 What are some predictions about the future population? Why are some predictions showing that population rate of growth will slow in the future? In what ways are science and technology part of the population growth debate?
- 3 Learn about glass making.
- 4 Learn more about nutrition's effect on the body, or specifically about eating fat and sugar.
- 5 Learn about white blood cells.
- 6 Make a plant classification chart showing the classification of a moss, a pine tree, and a flower.
- 7 Learn about the eubacteria kingdom. What are their characteristics and divisions?
- 8 -
- 9 Learn about the gas state. How does pressure affect elements in a gaseous state?
- 10 What is the function of the thyroid gland?
- 11 Learn about how matches work.
- 12 When calcium helps you stop bleeding, it is clotting your blood. Learn about the body's process of blood clotting.
- 13 Learn about human digestive enzymes.
- 14 Learn about snakes. What unique snakes can you learn about? Or, learn about what kinds of snakes live in your part of the world.
- 15 Learn about the refining process. How does heat make silver and gold pure?
- 16 Learn about how nerves repair themselves.
- 17 Learn about the motion of sound waves. What is frequency and amplitude?
- 18 Learn about resonance.
- 19 Learn about donkey herds and animal socialization. What animals need to be in a group? Why? How do the animals in the herd need each other?
- 20 Learn about how speakers work.
- 21 How were quenching and tempering part of the sword-making process? What effect do they have on the sword? Why?
- 22 Learn about the wheat plant. Where are its flower and fruit? What are its stages of growth?
- 23 Learn about automotive assembly lines unless there's another product you really want to learn about how it's made.
- 24 Learn more about rods and cones.
- 25 Learn about the structure of the brain. What is the pleasure center's scientific name? What are the other parts of the brain?
- 26-35 Review weeks
- 36-40 Double social studies lessons
- 41 Learn more about the heart and heart rate. What does resting heart rate show? How can exercise help and hurt the heart? How can fat help and hurt the heart?
- 42 Learn about how pick pockets can take stuff right off of us by using distraction. How do they trick our brains?
- 43 What happens to red blood cells when they die?

- 44 What's the largest saltwater fish? The largest bony fish?
- 45 What are the other types of amphibians? What makes them unique?
- 46 Learn the nitrogen cycle. (We looked at part of the cycle in the Book of Genesis.)
- 47 Learn about the types of gnats (unless there's another insect you are interested in). How can you naturally get rid of them? What can be done about a bite?
- 48 Learn about flies as pollinators.
- 49 Learn about sedimentary rocks. I suggest using Answers in Genesis or other sites by creationists. How do some famous sandstone features demonstrate the truth of Noah's flood?
- 50 Learn about a specific type of each of the three kinds of rock and rock identification.
- 51 Learn about zebras or rhinos, other animals in the same order as the horse.
- 52 Learn about the lymphatic system.
- 53 Learn more about hail.
- 54 Learn about the heating up of the atmosphere by electrons. Learn about how positive and negatively charged atoms are formed. In particular, why do electrons join the orbits of another atom?
- 55 What controls the way the hurricane turns?
- 56 What does vitamin B do for our bodies? What about omega-3?
- 57 Learn more about tornadoes.
- 58 Learn more about locust plagues.
- 59 Why does warm air rise? Why does temperature affect pressure?
- 60 Learn about light and heat energy.
- 61-70 Review Weeks
- 71 What is relative velocity? What does a graph of constant velocity look like? What does a graph of constant acceleration look like?
- 72 Learn about how polarity affects water as a solvent.
- 73 Learn more about adrenaline.
- 74 Learn about tertiary filters.
- 75 Can you learn about a local water treatment plant? What chemicals do they use in our drinking water? Why is it safe to drink?
- 76 Learn about bird migration patterns. What dangers do birds face during migration?
- 77 Learn about marine worms.
- 78 I said that all forces come in pairs and that all forces are two things interacting. What two objects are involved with gravity? How does that work?
- 79 Learn about the science of the perfect barbeque.
- 80 Read about buoyancy and how it relates to displacement.
- 81 Read more about the four forces of flight and Newton's Third Law and lift. (We will get to Bernoulli and air pressure.)
- 82 How is a bar of soap the same or different from laundry detergent?
- 83 Learn more about how earthquakes occur. How do they know where an earthquake's epicenter is?
- 84 Read about clouds. How are altostratus and nimbostratus clouds related? How can we predicate the weather by looking at the clouds? Try some rain predictions this week.
- 85 Learn about the different types of volcanoes. What's a supervolcano?
- 86 Learn how a printing press works. Could you make your own?
- 87 Learn more about teeth and diet or learn about the tissue that makes up teeth.
- 88 Learn about Bernoulli's Principle. Where else can it be applied?
- 89 Learn about how hot air balloons work. How do you fly one? How do you steer?

- 90 Other flying things you can make: kite, a drop helicopter.
- 91 Learn about how atoms bond as molecules.
- 92 How are potential and kinetic energy at play in a mousetrap?
- 93 What is the chemical makeup of emeralds?
- 94 Learn about dewpoint.
- 95 What other animals echolocate? There's lots to learn about echolocation.
- 96-105 Review Weeks
- 106 Where is green? Why isn't the sky or sunsets green?
- 107 Pick a mineral to learn about. What's a geode?
- 108 What is the acceleration of gravity? What causes some things to not hit the ground at the same time even though dropped at the same time?
- 109 Learn about dialysis.
- 110 Learn about the different kinds of fat and how our bodies use them.
- 111 Choose something else from the diagrams to learn about.
- 112 Choose a tree and learn its identification. How would you identify it? How can you tell the difference between a male and female tree?
- 113 Learn about a type of disease or genetic disorder.
- 114 What law of thermodynamics did we talk about today? What is thermodynamics?
- 115 Learn about gears. Look around your home for simple and compound machines.
- 116 Look for examples of perpetual motion machines. How do they work?
- 117 What is the coefficient of friction? How would you use it?
- 118 Learn about how animals live without sun at the bottom of the ocean.
- 119 Look online for problems to practice $F=ma$.
- 120 Experiment: Can you pour gas?
- 121 Learn about the Hudson Bay.
- 122 Learn about the Panama Canal.
- 123 Learn about the pre-frontal cortex.
- 124 Learn about the chemical reaction that causes bioluminescence.
- 125 Learn about the different types of symbiotic relationships.
- 126 Learn about power plants or about the chemical reaction that takes place in a battery.
- 127 Go outside, find a tree or two, and figure out what they are.
- 128 Conduct a solubility experiment, or learn about gases as solutes and solvents.
- 129 Learn about hair. What is the papilla and bulb?
- 130 Learn more about color and light.

Social Studies

- 1 The Twelve Tribes of Israel and the land of Israel, Bible patriarch's family tree
- 2 Axis and Allies in WWII (Roosevelt, Churchill, Chiang Kai-Shek, Stalin)
- 3 building materials in history (pykrete)
- 4 using data to create a population map
- 5 plague, King Richard, genocide
- 6 cultural value placed on male/female
- 7 the history of bathing
- 8 racism, apartheid, Nelson Mandela (ethnicity, economic sanctions)
- 9 14th Amendment, immigration
- 10 crying out to God, "for such a time as this"
- 11 Mountain of God, Mount Everest (Sinai Peninsula, Himalayas, Nepal)
- 12 Canaanite, Hittite, Perrizite, Amorite, Hivite, Jebusite
- 13 plundering, pirates (Sir Francis Drake)
- 14 miracles
- 15 Vikings (Scandinavia)
- 16 lepers (ostracized)
- 17 famous Winston Churchill speeches
- 18 how we learn speech
- 19 Midianites
- 20 Martin Luther King, Jr. "I Have a Dream" speech
- 21 swords (Yamashita, Napoleon, Wallace, Charlemagne)
- 22 good leaders, Dr. Martin Luther King, Jr. as a leader of the Civil Rights Movement
- 23 culture, work ethic
- 24 history of who has lived in the land of Israel
- 25 Six-Day War
- 26 - 35 Review Weeks
- 36 Leading up to WWII (Treaty of Versailles, Hitler)
- 37 Timeline of WWII (Gladys Aylward, Brother Andrew, Corrie Ten Boom, Jacob DeShazer, Darlene Deibler)
- 38 Hitler, Churchill, Stalin, Roosevelt
- 39 Holocaust
- 40 WWII and Japan, impact of the war
- 41 the establishment of the political nation of Israel after WWII (The Partition Plan)
- 42 magic
- 43 reservoir
- 44 the number seven
- 45 Egyptian homes
- 46 God using evil to fulfill His purposes
- 47 biggest deserts of the world
- 48 wasteland
- 49 abominations
- 50 -
- 51 God's love/favoritism
- 52 pottery and archeology
- 53 time zones (longitude, latitude, Prime Meridian, Greenwich Mean Time)

54	hail in the Bible
55	hurricane geography and history
56	bad leaders
57	signs from God
58	locust plagues
59	Red Sea (inlet)
60	meaning of light in the Bible
61 - 70	Review Weeks
71	Declaration of Independence (Thomas Jefferson)
72	discovery of the North Pole (Peary, Cook)
73	events leading to the American Revolution (no taxation without representation)
74	water crisis
75	solve the world's water crisis
76	socialism
77	Ark of the Covenant
78	Isaac Newton
79	trials (plaintiff)
80	good leaders, Archimedes
81	feudal system (siege)
82	State of the Union Address
83	Tiananmen Square
84	gospel commandments
85	volcanoes and geography and history and archeology (Pompeii)
86	Gutenberg Press
87	how laws get made (bill)
88	elections, representative democracy (candidate, run for election)
89	three branches of power (executive, legislative, judicial)
90	Write a representative.
91	Feast of the Harvest and Feast of the Ingathering
92	angels
93	Nobel Peace Prize
94	London Fog (The Great Smog)
95	tabernacle
96 - 105	Review Weeks
106	memorials, Valiant Five, Gateway Arch, Lincoln Memorial, Iwo Jima, Taj Mahal
107	apprentices (guilds, Ben Franklin, Nathaniel Bowditch)
108	the development of armor
109	turbans (sikh)
110	celebrations (bar mitzvah, Quinceañera)
111	Hanukkah (Maccabees, menorah)
112	gold rush (California Gold Rush, entrepreneur, patent, lower wage)
113	census
114	James Joule (first law of thermodynamics)
115	Leonardo DaVinci (perspective, Mona Lisa, The Last Supper)
116	Johannes Sebastian Bach (Baroque, melody, harmony)
117	crown jewels (monarchy)
118	The Tower of London (The Battle of Hastings, William the Conqueror)
119	empathy and sympathy

120	overview history of Africa (Pygmies, Mali, Carthage)
121	landforms
122	landforms
123	fear, cultural superstitions
124	Search the Bible for references to the Feast of Unleavened Bread and to yeast.
125	Shavuot
126	Faraday creating electricity and Edison building the first power plant
127	Moai, Terracotta Warriors, Sphynx, Christ the Redeemer
128	William Wilberforce (abolitionist)
129	hair and culture
130	cherubim (Rafael)
131 – 140	Review Weeks
141 – 145	Timeline
146 – 180	Review Activities

Social Studies Explore More

- 1 Where does the division of the land of Israel for the tribes happen in the Bible? How does it happen? Are the tribes of Israel ever mentioned in the New Testament? What does it say? Are there any modern population statistics about the tribes of Israel?
- 2 Learn about the Invasion of Normandy.
- 3 When people make “green” buildings? What are they doing? How are they doing it?
- 4 China and India are shown in this data as the most populated. How do those countries address the issue of a fast-growing population? Have they been successful? Why or why not? Do you have suggestions for them?
- 5 Learn about the Crusades.
- 6 Make a list of some female heroes in the Bible. What common characteristics can you find in them?
- 7 Learn about ritual cleaning in Judaism and Islam.
- 8 Learn about Nelson Mandela.
- 9 What are America’s policies on immigration? What are the different view points on immigration?
- 10 Use an online Hebrew concordance to learn about the type of crying out David does in the Psalms.
- 11 Learn about the history of climbing Mount Everest.
- 12 Why do modern day Palestinians claim they are the descendants of the Jebusites?
- 13 Learn about the Golden Age of Pirates or modern-day piracy.
- 14 Read testimonies online or write your own down to share with others.
- 15 Learn about the Vikings when they were at home.
- 16 Look up leprosy in the Bible. How is leprosy a symbol for sin?
- 17 Learn more about Churchill. You could also find the speeches in full to read or to listen to online.
- 18 Read about speech acquisition.
- 19 What is the history of the area of Midian?
- 20 Learn about the March on Washington. Choose another speaker from that day to learn about.
- 21 Choose either Napoleon or Wallace to learn more about.
- 22 Learn about Martin Luther King, Jr.
- 23 Choose a country. Read about its culture. What ethnic groups are there with different cultures?
- 24 Learn more about May 14, 1948 and what took place to bring it about.
- 25 How did the territories won in the Six-Day War get back to Palestinian control?
- 26-35 Review Weeks
- 36 Learn about Hitler’s youth and rise to power.
- 37 Learn about the uprisings in Warsaw.
- 38 Learn about Benito Mussolini, Chiang Kai-Shek, or Hirohito, the leaders of Italy, China, and Japan during WWII.
- 39 Learn about concentration camps or Corrie Ten Boom’s experience in a concentration camp.
- 40 What are you interested in today? You could find out who Rosie the Riveter is. You can learn about Japan’s campaign in China or the aftermath of WWII in China and Europe leading to the rise of communism.

- 41 Who was in Israel before 1944? What's the history of Israel from 1948 to 1967?
- 42 You need to be careful learning more about this, but you can try to read about some witch doctors who have come to Christ. There's an article on Gospel for Asia's site called, "Christian Witch Doctor" Leads Many to Christ."
- 43 Where are the biggest reservoirs? How do they help those regions?
- 44 Another number we find a lot in the Bible is three. Be careful what sources you use, but what can you learn about the meaning of the number three in the Bible. Better yet, search for three in the Bible and come to your own conclusions.
- 45 What can you learn about Egyptian homes? Remember to read in more than one place. There is often conflicting information out there, especially about things like this that we can't observe for ourselves.
- 46 The book of Judges is full of the story of God using evil to bring about His purpose. Study it. What was His purpose? How did He accomplish it?
- 47 Learn about one of these deserts and how it affects life in that region.
- 48 Choose a wasteland to learn about, such as swamps, or learn about how man has created wastelands in other ways and what you can do about it.
- 49 What does God call an abomination?
- 50 Double science lesson
- 51 Learn about zebras or rhinos, other animals in the same order as the horse.
- 52 Learn about other archeological finds that support the Bible.
- 53 How were these things decided? Who sets the day and time?
- 54 Read the prophecies concerning hail. What's going to happen? Why?
- 55 Choose a country of the world affected by hurricanes and learn about the history of impact of hurricanes in that area.
- 56 Who are some other notoriously bad leaders? What do they all have in common?
- 57 Learn about Darlene Deibler whom I mentioned during our WWII studies. What are some ways God showed signs to her that He was still in control and still loving her even though she was in prison and in a horrible situation?
- 58 Read more about historic locust plagues.
- 59 Learn about the history of the Red Sea.
- 60 Do a Bible search on the word, light. You could also look up flames. God appears in the burning bush. The temple has light that is never to go out. What meaning does light have in the Bible?
- 61-70 Review weeks
- 71 What was the impact of the Declaration of Independence around the world?
- 72 There is a long article on the Smithsonian website if you want to keep reading.
- 73 Learn about the Battle of Lexington and Concord.
- 74 Learn about the water crisis and what's being done. What methods/ideas do you think are the best?
- 75 Save the world!
- 76 Learn about socialism.
- 77 Learn about the history of the Temple Mount. What's its status today?
- 78 Learn about Newton's pursuits after the Principia. What areas did he move into?
- 79 Learn about becoming a judge in America.
- 80 Learn about Archimedes.
- 81 Learn about the feudal system in Japan.
- 82 Listen to or read a State of the Union Address. One suggestion is Lincoln's 1863 speech, or if you want to watch one, search for Ronald Reagan. In 1982 he was the first

- president to invite a person to the speech to use as an illustration of a point. Every president since has done the same.
- 83 What was the aftermath of this event?
- 84 -
- 85 Learn about the excavation of Pompeii or about another famous eruption.
- 86 Learn about Gutenberg or Tyndale.
- 87 Read more about the process. What's a pocket veto? What bills are in progress now?
- 88 Learn about the election process. What's a caucus? What other parties are there? What was the beginning of our two-party system?
- 89 Read more about the separation of powers.
- 90 Frequent letters can get you recognition for your passion and concern, but you don't want it to be for harassment! Write professionally, clearly, and purposefully.
- 91 Read more about these Feasts. How are they celebrated today?
- 92 You can read more excerpts from Billy Graham's book online.
- 93 Who was Gorbachev and why did he win the prize for peace?
- 94 How does pollution affect populations?
- 95 Look online for images of the tabernacle and explanations of its meaning to the Israelites.
- 96-105 Review Weeks
- 106 Learn about more famous memorials. If you are interested in a particular country or group of people, search specifically for those memorials.
- 107 Learn more about Nathaniel Bowditch.
- 108 Learn about medieval weapons or defenses.
- 109 Choose a country or culture and learn about a special ceremony they have.
- 110 Learn about the Maccabees, or even read the First Book of Maccabees in the Apocrypha.
- 111 What's your favorite holiday? Why?
- 112 Learn about Chinese immigrants.
- 113 You can see more censuses online. You could even search for your ancestors in a census.
- 114 Learn about Joule.
- 115 What was Leonardo's contribution to the study of anatomy?
- 116 This would be a good time to go listen to some Bach music.
- 117 Learn about the British Parliament. How is it similar and different from Congress?
- 118 Learn about the Normans.
- 119 How can you show people you value them?
- 120 Who is Hannibal? What is he famous for and what does he have to do with this lesson?
- 121 Learn about Henry Hudson discovering the Hudson Bay.
- 122 Learn about the Panama Canal.
- 123 Why do people hold onto superstitions?
- 124 Passover (Seder)
- 125 Learn about Shavuot.
- 126 Learn about Faraday's law.
- 127 Learn about the Terracotta Army.
- 128 How are these people connected with William? Thomas Clarkson, William Pitt
- 129 The queen was Marie-Antoinette. Who was that?
- 130 Learn about Rafael. See more of his work.