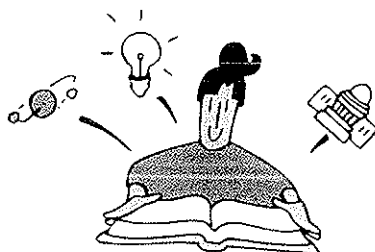


LOOKING AT VERBS AND MAPPING



FOR
ALL
STUDENTS

BLOOM'S QUESTION STARTERS

KNOWLEDGE

What is . . . ?
Where is . . . ?
When did . . . ?
Name two things. . . ?
Who were the main characters?
Can you tell three things. . .
How did the selection end?
How is . . . ?
Which one. . . ?
List two things that. . .
State an event. . .
Say the name. . .

COMPREHENSION

What was the main idea. . . ?
Describe what is meant by. . .
Retell the story.
Explain why the story has the title that it does.
Explain what the author means by. . .
Describe what happened before _____ ?
What is meant by. . . ?
How would you characterize. . . ?
Summarize the story.

APPLICATION

What examples can you find to support?
What would result if. . . ?
Using what you know, how would you solve. . . ?
What questions would you ask if. . . ?
Using what you know, construct. . .
Think of a situation that occurred in the story and tell what you have done.
How is _____ similar to _____ ?
How would you classify. . . ?

ANALYSIS

How would you compare. . . ?
Distinguish between _____ and _____.
How would you contrast. . . ?
What motive is there. . . ?
What is the relationship between _____ and _____ ?
What evidence can you find. . . ?
What was the most exciting part?
What is the theme of. . . ?
What ideas justify. . . ?
How is _____ related to _____ ?

SYNTHESIS

Create a new ending to the story.
How would you rewrite the selection from _____'s point of view?
What do you predict will happen?
How could you improve. . . ?
What changes would you make to. . . ?
Role play the story.
Invent a new scenario.
How could you change the plot?
Design a model that tells the story.
What inferences can you make about. . . ?

EVALUATION

Justify _____'s actions in the story.
Do you agree with _____? Why or why not?
What is your opinion of _____ and why do you feel that way?
What you recommend _____? Why or why not?
What choice would you have made if you were in _____ situation?
Would it be better if. . . ?
Why was it better that. . . ?
What did you like best?

Constructing Behavioral Objectives

Behavioral objectives have four parts:

1. A general behavior (Bloom's)
2. A general area of learning (unit title)
3. A specific behavior that matches the general behavior (verb)
4. A specific learning for the lesson (specific content)

Objective:

The learner will demonstrate a knowledge of mammals by listing three characteristics of mammals.

	Behavior	Learning
General	1 Knowledge	2 Mammals
Specific	3 Listing	4 Three characteristics of a mammal

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Open Response Action Words

Direction	Action
Describe, Identify, Define	Identify the main qualities or distinguishing characteristics of your subject, using specific facts or sensory details.
Recount, Narrate, Relate, Tell About	Present the sequence of events in a story or the steps in a process in chronological order. Use vivid verbs and sensory details.
Discuss	Identify key points or relationships, backing these up with examples, quotations, comparisons, and other details.
Explain	Present the main points or important steps in whatever you have been asked to explain, using facts, examples, and reasons to clarify what you mean.
Compare, Contrast	Show the ways in which two or more things are alike and the ways in which they differ, using examples and other details to support similarity and difference you point out.
Analyze, Evaluate, Review	Examine the main qualities of your subject to arrive at a conclusion about some aspect of it, such as how well the parts function together as a whole.
Show Causes and Effects	Present the reasons for and the results of a particular event or situation, using specific details to clarify precisely what happened.
Persuade, Convince, Express your Opinion	State your point of view and support it with facts, statistics, examples, quotations, and other sound evidence.
Interpret	Explain in your words the meaning of whatever you have been asked to interpret, supporting you ideas with facts and other details.
Summarize	Present a condensed version of a story or a process by relating only the main events or steps and showing how one leads to the next. Do not include supporting details or other types of elaboration.

BENCHMARK VERBS

1. INTERPRET: explain the meaning of
2. ANALYZE: to study or determine the nature relationship of the parts of.
3. DEVELOP: to set forth or make clear by degrees or in degrees or in detail.
4. DISTINGUISH: To perceive as being separate or different.
5. EXPLAIN: to make plain or understandable.
6. COMPARE: find out or point out how something is alike and how they are different.
7. CONTRAST: To show noticeable differences.
8. FORMULATE: to reduce to or express in a formula.
9. GENERATE: to bring into existence.
10. EVALUATE: to determine or fix the value of.
11. CONSTRUCT: to make or form by combining parts.
12. SUGGEST: to put a thought plan or desire into a persons mind.
13. DEFINE: to find or make the limits.
14. COMMUNICATE: to make known.
15. EXAMINE: to inspect closely.
16. IDENTIFY: to cause to be or become identical.
17. ILLUSTRATE: to make clear by giving or serving as an example or instance.
18. MODEL: a miniature representation of something.
19. DISCRIBE: to represent or give an account of in words.
20. CONDUCT: the act, manner, or process of carrying on. Lead, direct.
21. RELATE: to give an account of.
22. INVESTIGATE: to observe or study closely.

23. CLASSIFY: to assign to a category.
24. PREDICT: to declare in advance.
25. DISSECT: to separate into pieces.
26. OBSERVE: to come to realize or know especially through consideration of noted facts
27. DIFFERENTIATE: to mark or show a difference in
28. INNATE: belonging to the essential nature of something
29. LEARNED: to gain knowledge
30. DESIGN: to conceive and plan out in the mind
31. CREATE: to bring about through a course of action
32. CATEGORIZE: to put in a category or classify
33. STATE: to express the particulars of especially in words.
34. APPLY: to put to use especially for some practical purpose
35. DEMONSTRATE: to prove or make clear by reasoning or evidence
36. RECOGNIZE: to admit to the fact of
37. CONNECT: to join or fasten
38. DIGRAM: a graphic design that explains rather than represents
39. PREDICT: foretell on the basis of observation, experience, or scientific reason
40. SYNTHESIZE: to combine or produce a complex whole of concepts
41. RESEARCH: studious search or examination
42. USE: to put into action or service
43. LOCATE: to determine the location of
44. INFER: to derive as a conclusion for facts or premises, surmise

VERBS FROM THE MATH STANDARDS

K-4

K	1st	2nd	3rd	4th
Count	Count	Count	Describe	Read
Understand	Use strategies	Use strategies	Write	Recognize
Explain	Describe	Describe	Count	Represent
Represent	Represent	Represent	Recognize	Use
Group	Investigate	Connect	Represent	Write
Identify	Connect	Model	Conduct	Identify
Connect	Recognize	Sort	Identify	Explain
Use	Eliminate	Classify	Illustrate	Compare/order
Recognize	Estimate	Communicate	Utilize models	Utilize models
Describe	Determine	Compare/order	Compare/order	Develop
Estimate	Compare/ Order	Analyze	Interpret	Find
Compare/ Order	Communicate	Find	Design	Match
Discuss	Model	Measure	Measure	Interpret
Use models	Show	Estimate	Find	Measure
Sort	Apply	Select	Estimate	Estimate
Partition/ Share/Develop	Identify	Calculate	Express	Restate
Solve	Develop	Tell	Tell	Complete
Duplicate	Solve	State	Complete	Create
Extend	Sort/ Classify	Create	Create	Distinguish
Create	Select	Replicate	Demonstrate	Construct
Locate	Write	Extend	Distinguish	Locate
Arrange	Explore	Match	Replicate	Classify
State	Interpret	Sort	Locate	Express
Differentiate	Extend	Recognize	Draw	Select
Explore	Manipulate	Name	Contrast	Solve
Tell	Replicate	Interpret	Complete	Attain
Order	State	Express	Express	Apply
Name	Distinguish/ between	Select	Select	Conduct
Measure	Tell	Identify	Solve	Determine
Analyze	Determine	Solve	Determine/ between	Demonstrate
Interpret	Select	Demonstrate	Apply	Develop
Demonstrate	Measure	Apply	Relate	Utilize models
Consecutively/ order	Analyze	Relate	Develop	Compare/ order
		Develop	Utilize models	
		Utilize models		

VERBS FROM THE MATH STANDARDS

5 th	6 th	7 th	8 th
Use Models	Demonstrate	Relate	Read
Develop	Find	Demonstrate	Write
Identify	Round	Convert between	Compare
Round	Convert	Find	Convert
Compare	Compare	Compare	Order
Apply	Order	Represent	Understand
Model	Use	Apply	Justify
Solve	Recognize	Recognize	Apply
Use	Identify	Model	Model
Model	Model	Develop	Develop
Solve	Analyze	Compute	Compute
Interpret	Solve	Solve	Solve
Write	Estimate	Determine	Estimate
Select	Determine	Write	Calculate
Evaluate	Write	Graph	Graph
Describe	Evaluate	Evaluate	Write
Draw conclusions	Complete	Use tables/graphs	Evaluate
Make predictions	Investigate	Create/complete	Translate
Draw	Compare	Use	Use
Predict	Describe	Create	Differentiate
Use vocabulary	Plot points	Classify	Form
Describe results	Select	Examine	Select
Make conversions	Make conversions	Understand	Compute
Establish	Compare/Contrast	Build/Construct	Describe
Understand	Draw/measure	Select	Draw
Determine	Establish	Find different. . .	Apply
Measure	Apply formulas	Draw/measure	Design
Count	Find	Derive/Use	Conduct
Collect Data	Formulate questions	Apply	Explain
Construct	Collect Data	Estimate	Interpret
Justify conclusions	Construct graphs	Compute	Compare/contrast
List/Explain	Interpret Data	Explain	Analyze
Use observations	Use observations	Interpret	Create
Identify/predict	Distinguish	Analyze	Make predictions
		Make conjectures	Use observations
		Design	

ALGEBRA

Evaluate

Translate

Solve

Perform

Simplify

Use

Communicate

Distinguish between

Determine

Know

Identify

Factor

Represent

GEOMETRY

Define

Apply

Explore

Give Justification

Identify

Use

Relate changes

Solve

Investigate

Draw

Examine

Classify

Write

Interpret

Verify

Explain

Compare/Contrast

LITERACY VERBS

K-4

K	1st	2nd	3rd	4 th
examine	examine	examine	examine	examine
give	give	give	give	give
participate	participate	participate	participate	participate
use	use	use	use	use
demonstrate	demonstrate	demonstrate	demonstrate	demonstrate
respond	respond	respond	respond	respond
apply	apply	apply	apply	apply
describe	tell	tell	tell	tell
express	retell	retell	retell	retell
make	create	create	create	create
listen	utilize	utilize	utilize	utilize
follow	polish	polish	polish	polish
identify	select	select	select	select
review	follow	revise	revise	revise
generate	ask	write	write	write
reread	explore	adapt	adapt	adapt
prepare	identify	evaluate	evaluate	evaluate
write	listen	compare/contrast	compare/contrast	compare/contrast
describe	maintain	ask/answer	communicate	communicate
express	develop	distinguish	provide	make
share	elaborate	contribute	express	encourage
contribute	reread	make	listen	answer
draw	share	organize	identify	listen
incorporate	determine	match	summarize	infer
	vary	vary	gather	organize
	produce	incorporate	respond	develop
		combine	develop	create
		compose	eliminate	draft
		embed	create	embed
				employ
				maintain
				eliminate
				ask

LITERACY VERBS

Verbs common to all grades 5-8

demonstrate	write	contribute	deliever
participate	evaluate	correct	listen
establish purpose	view	organize	create
devise	edit	maintain	publish
share	apply	self-evaluate	generate
monitor	connect	make inferences	infer
draw conclusions	analyze	compare/contrast	identify
distinguish between	scan/skim	summarize	read
note taking	utilize	develop	determine
gather	prepare	participate	present

5th grade	6th grade	7th grade	8th grade
adjust	define	use	use
explain	explain	speak for	speak for
anticipate	interpret	explain	report
describe	adjust	design	design
locate	select	vary	vary
identify cause/effect problem/solution	synthesize	prioritize	critique
	understand	understand	select
		examine	interpret
		formulate	formulate
			examine
			synthesize
			classify
			defend
			respond to
			self select/apply
			define
			evaluate

LITERACY VERBS
9-12

evaluate	write	elaborate	apply
communicate	adapt	arrange	revise
refine	maintain	demonstrate	access
personalize	connect	draw inferences	expand
distinguish between	recognize	summarize	skim
paraphrase	investigate	compare/contrast	discuss
discriminate between	examine	justify	define
investigate	categorize	formulate	establish
organize	create		

VERBS FROM THE SCIENCE STANDARD

K	1 st	2 nd	3 rd
Record	Communicate	Communicate	Communicate
Ask questions	Ask questions	Develop questions	Develop questions
Estimate	Estimate	Estimate	Estimate
Measure	Measure	Measure	Measure
Use tools	Use tools	Use tools	Use tools
List	List	Conduct	Calculate
Predict	Predict	Predict	Predict
Match	Read	Read	Analyze
Apply	Apply	Apply	Apply
Recognize	Verify	Recognize	Construct
Classify	Classify	Classify	Classify
Identify	Identify	Discuss	Relate
		Identify	Identify
		Model	Determine
Demonstrate	Demonstrate	Demonstrate	Demonstrate
Chart	Chart	Chart	Chart
Investigate	Investigate	Investigate	Investigate
Differentiate	Differentiate	Differentiate	Differentiate
Distinguish	Distinguish	Distinguish	Distinguish
Illustrate	Illustrate	Illustrate	Illustrate
Compare/ Contrast	Compare/ Contrast	Compare/ Contrast	Compare/ Contrast
Describe	Locate	Describe	Describe

Collect Evidence for all K-3

**VERBS FROM THE SCIENCE STANDARDS
GRADE 4**

Analyze	Apply	Communicate
Conduct	Collect	Classify
Classify	Compare/Contrast	Construct
Develop	Demonstrate	Differentiate between
Describe	Evaluate	Estimate/Measure
Interpret	Identify	Generate Conclusions
Illustrate	Investigate	Locate
Organize	Refine Questions	Use
Recognize	Read Instruments	

VERBS FROM THE SCIENCE STANDARDS

5-8

Analyze	Apply	Calculate	Compare
Define	Evaluate	Formulate	Identify
Interpret	Justify	Verify	Communicate
Develop	Implement	Construct	Suggest solutions
Summarize	Explain	Distinguish between/compare/contrast	
Generate	Examine	Describe	Model
Conduct investigations		Observe	Illustrate
Investigate	Relate effect	Classify	Dissect
Predict outcomes	Relate development	Differentiate among	
Explain process	Design	Conduct simulations/investigations	
Diagram	Create	Construct	Conduct field studies
Use	Research methods		Locate
Recognize	Give examples	Infer	Understand why
Connect	Synthesize	Research	Map patterns
Describe Cause and Affect		Demonstrate understanding	
Describe interactions	Describe relationships	Identify similarities/differences	
Demonstrate the effect of		State Characteristics of	

PHYSICAL SCIENCE

Analyze (3)	Balance Equations	Calculate (8)
Collect	Distinguish between/among (4)	Compare/Contrast (12)
Communicate	Conduct (3)	Create
Define	Describe (3)	Design (2)
Determine	Develop	Differentiate (2)
Discuss (2)	Evaluate	Examine
Explain (7)	Formulate	Gather/Analyze
Identify (7)	Illustrate (2)	Interpret graphs
Investigate	Label	Model (4)
Name	Predict	Recognize
Relate (3)	Research (6)	Solve problems (2)
Summarize (3)	Use	Utilize technology
Write	Write formulas	

ENVIRONMENTAL SCIENCE

Categorize
Collect/Analyze
Compare/Contrast (7)
Construct (3)
Describe (10)
Determine
Diagram
Differentiate
Distinguish
Evaluate (4)
Explain
Interpret (2)
Investigate (4)
Predict (2)
Relate
Research (2)
Use Appropriate
Utilize Technology

PHYSICS

Analyze **Give examples**
Apply (10) **Identify**
Calculate (28) **Interpret**
Calibrate **Manipulate data**
Compare/contrast (6)
Compute **Perform (2)**
Construct **Predict**
Describe (6) **Prove**
Determine (2) **Recognize**
Develop **Relate (3)**
Differentiate (2)
Discuss **Research (4)**
Distinguish (2) **Resolve**
Draw diagrams (3)
Explain (2) **Solve (2)**
Evaluate (2) **Use (4)**
Formulate **Summarize**
Gather **Solve problems (10)**
Give Examples **Use technology**

BIOLOGY

ANATOMY/PHYSIOLOGY

Describe (11) Evaluate (8)
Explain (4) Construct
Investigate (2) Discuss
Compare/Contrast (20)
Develop List
Identify (4) Model (4)
Predict Examine
Distinguish Recognize
Analyze (7) Differentiate (4)
Relate (4) (between/among)
Discuss Illustrate
Summarize (4) Interpret
Research (3) Classify (2)
Gather Name
Formulate Cite examples
Communicate diagram
Understand
Collect
Utilize technology

Describe (17) Evaluate
Explain (8) Infer
Investigate Sequence
Compare/Contrast (3)
Develop Write formulas
Identify (25) Apply
Predict
Distinguish (3)
Analyze (3)
Relate (3)
Discuss
Summarize
Research (3)
Gather
Formulate
Communicate
Understand
Collect
Utilize technology

CHEMISTRY

Summarize (2)	Describe (5)	Explain (9)
Perform	Analyze (3)	Investigate
Draw (2)	Derive (2)	Compare Contrast (10)
List/Explain	Solve Problems	Complete/Balance
Determine (5)	Examine	Correlate
Differentiate (2)	Apply (4)	Write/Balance
Predict (5)	Construct	Demonstrate (3)
Research (2)	Interpret	Develop
Name	Research (2)	Separate
Gather	Design	Formulate
Use (6)	Communicate	Identify (4)
Recognize	Understand	Calculate (7)
Collect	Give examples	Define (4)
Discuss	Evaluate (2)	Utilize technology
Distinguish between/among (5)	Write and balance formulas/equations (3)	

**SOCIAL STUDIES
K-4**

K	1	2	3	4
Identify	Identify	Identify	Identify	Identify
Recognize	Recognize	Recognize	Recognize	Recognize
Discuss	Discuss	Discuss	Discuss	Discuss
Describe	Describe	Describe	Describe	Describe
Define	Name	Define	Define	Research
Understand	Locate	Locate	Locate	Locate
Use	Explain	Explain	Explain	Explain
Illustrate	Understand	Understand	Utilize	Explore
Discuss	Label	Construct	Label	Utilize
	Show relationship	Explore	Create	Interpret
	Illustrate	Compare	Research	Label
	Demonstrate	Examine	Analyze	Create
	Determine	Determine	Determine	Determine
	Explore	Classify	Evaluate	Examine
K-4	COMPARE/CONTRAST/ DISTINGUISH BETWEEN			
		Investigate	List	Analyze
		Give Examples		Demonstrate
				Name
				Understand
				Evaluate
				Discuss differences
				Compare

SOCIAL STUDIES VERBS

5-8

Classify	Analyze	Demonstrate
Understand	Compare/Contrast	Investigate
Determine	Predict	Examine
Illustrate (charts and graphs)	Locate	Describe
Apply	Identify	Interpret
Define	Evaluate	Explain
Recognize	Read/interpret (charts and graphs)	Design (charts and graphs)
Distinguish between	Trace	Locate
Summarize	Discuss	Describe
Chart	Cause/Effect	Create/construct (timelines)

Ark. History 5-8

Compare/Contrast

Identify/Map

Examine

Explain

Describe

Discuss

Define

Explore

Research

Analyze

Ark History 9-12

Compare/Contrast

Investigate

Examine

Explain

Describe

Discuss

Define

Explore

Research

Analyze

American Government

Compare/Contrast

Analyze

Discuss

Describe

Evaluate

Examine

Explain

Investigate

American History

Compare/Contrast

Analyze

Discuss

Describe

Evaluate

Examine

Explain

Investigate

Illustrate

Trace

Research

Map

Chart (strength/weaknesses)

Outline

Summarize

Debate

Identify/Analyze

Civics (1 semester Core) - **Civics/American Government - Civics**

Compare/Contrast

Distinguish between

Discuss

Explain

Analyze

Define

Examine

Evaluate

Identify

Categorize

Describe

Research

Investigate

Categorize

Economics

Compare/Contrast

Analyze

Explain

Differentiate between

Describe

Illustrate

Distinguish between

Discuss

Evaluate

Examine

Summarize

Demonstrate

Determine

Describe differences

Identify

World Geography

Compare/Contrast

Examine Categorize

Explain Identify

Analyze Discuss

Describe Explore

Investigate

Research

Evaluate

Summarize

Survey

Construct a distribution pattern

Compute differences

Interpret (maps, charts, graphs)

Critique Develop hypotheses

Create (maps, charts, graphs)

World History

Compare/Contrast

Examine

Explain

Analyze

Describe

Investigate

Research

Evaluate

Summarize

Illustrate

Discuss

Contemporary American History

Compare/Contrast

Investigate

Research

Examine

Discuss

Analyze

Sociology

Analyze

Investigate

Discuss

Examine

Describe

Identify

Research

Psychology

Compare/Contrast

Distinguish between

Discuss

Summarize

Identify

Research

Examine

Critique

Define

Explain

Describe

Investigate

Employ (basic concepts of statistical data e.g. mean, median, mode)

Determine between

FOREIGN LANGUAGE VERBS

K-4

Use (3)

Listen

Respond

Identify (2)

Discuss (2)

Recognize (3)

Understand

Examine

Compare/Contrast

Build

Relate

Use Technology

Problem solve

Demonstrate recognition,
understanding

5-8

Use (3)

Interact

Comprehend

Respond

Synthesize

Initiate

Sustain

Engage

Analyze

Similarities/Differences

Examine

Compare/Contrast

Investigate

Exhibit

Interpret

Apply

Explore

Establish

9-12

Use (3)

Examine

Analyze

Compare/Contrast

Initiate

Sustain

Bring

Employ (2)

Synthesis (3)

Apply

Take notes

Evaluate

Select

Assess

Critique

Interact

Maintain

Collaborate

ART VERBS

K-4

Examine (2)
Respond Evaluate
Communicate
Distinguish between
Discover (2)
Record Assess
Identify Develop
Practice Build
Follow Exhibit
Recognize (3)
Apply Discuss
Investigate
Use Analyze
Transfer
Demonstrate
Create (2)
Exercise/Use
Produce
Collaborate
Understand

5-8

Investigate
Examine (3)
Identify
Research
Discuss (2)
Gain insight
Discover (3)
Recognize
Engage (2)
Utilize
Create (2)
Produce (2)
Use (2)
Demonstrate
Reflect
Develop (2)
Participate
Determine (2)
Justify
Establish

9-12

Identify (3) present
Assimilate
Diversify Assemble
Compare/Contrast
Explore (2)
Employ Relate
Investigate
Connect Reflect
Apply inquiry
Research
Create (2)
Generate
Communicate (2)
Collaboration
Analyze
Evaluate
Defend
Assess
Critique
Prepare

Music Verbs

K-4

Sing/play
Differentiate between
Echo
Perform
Improvise
Create
Recognize
Identify
Interpret
Participate
Explore
Examine
Correctly name
Describe

5-8

Sing/play
Compare/Contrast
Distinguish
Perform
Improvise
Create
Recognize
Identify
Notate
Read
Explore
Use technology
Evaluate
Incorporate
Demonstrate
Respond to

9-12

Sing/play
Compare/Contrast
Transpose
Perform
Improvise
Compose
Recognize
Arrange
Notate
Appraise
Explore
Analyze
Apply
Describe
Demonstrate
Modify
Exhibit
Model
Explain
Define
Determine factors

HEALTH/P.E. K-4

VERBS COMMON TO K-4

identify
locate
practice

demonstrate
know
describe

participate
understand
discuss

perform
recognize
explain

KINDERGARTEN:

move forward	travel	march	clap	stomp
move appropriately	use	extend	bounce	volley
explore	name/locate	define	tell	

FIRST GRADE:

distinguish between	dramatize	apply	move	express
step	catch	dribble	volley	show
exhibit	share	name	illustrate	

SECOND GRADE:

create	use	travel	maintain	catch
move	dribble	kick	step toward	volley
comply	cooperate	define	list	respond
differentiate between	choose	distinguish between		model

THIRD GRADE:

play	create	throw	catch	dribble
step forward	maintain	sustain	compare/contrast	express
apply	examine	use	develop	determine
list	name	define	plan	

FOURTH GRADE:

create	depend	apply	throw	catch
use	dribble	strike	monitor	maintain
categorize	choose	exhibit	compare/contrast	list
examine	model	analyze	formulate	plan
record	distinguish between			

Physical Education/Health

5 th	6 th	7 th	8 th
Apply	Apply	Apply	Apply
Analyze	Analyze	Analyze	Analyze
Compare/Contrast	Compare/Contrast	Compare/Contrast	Compare/Contrast
Develop	Develop	Develop	Develop
Describe	Describe	Describe	Describe
Discuss	Discuss	Discuss	Discuss
Demonstrate	Demonstrate	Demonstrate	Demonstrate
Explain	Explain	Explain	Explain
Evaluate	Evaluate	Evaluate	Evaluate
Examine	Examine	Examine	Examine
Identify	Identify	Identify	Identify
Participate	Participate	Participate	Participate
Recognize	Recognize	Recognize	Recognize
Review	Review	Review	Review
Understand	Understand	Understand	Understand
Use	Use	Execute	Correct errors
Perform	Examine	Follow	Assess
Calculate	Appraise	Create	Devise
Show respect	Perform	Choose	Perform
Define	Implement	Accept/respect	Refine
Introduce	Explore	Predict outcomes	Choose
Make responsible decisions	List	Seek	Display
	Determine	Classify	Use verbal/ non-verbal
	Practice	Model	Reinforce
		Chart	Distinguish
		Differentiate	Construct
			Research

Physical Education 9-12

Compare/Contrast
Participate
Evaluate
Identify
Apply
Exhibit
Assess
Engage
Create
Monitor
Analyze
Investigate
Evaluate
Examine
Discuss
Appraise (costs)
Demonstrate

Health 9-12

Compare/Contrast
Access
Describe
Examine
Analyze
Identify
Review
Investigate
Evaluate
Discuss
Demonstrate
Develop
Utilize
Appraise Methods
Design
Implement
Reinforce
Practice
Understand

Strands

Content Standards

Nature of Science	
1. Characteristics and Processes of Science	Students shall demonstrate and apply knowledge of the characteristics and processes of science using appropriate safety procedures, equipment, and technology.
Life Science	
2. Living Systems: Characteristics, Structure, and Function	Students shall demonstrate and apply knowledge of living systems using appropriate safety procedures, equipment, and technology.
3. Life Cycles, Reproduction, and Heredity	Students shall demonstrate and apply knowledge of life cycles, reproduction, and heredity using appropriate safety procedures, equipment, and technology.
4. Populations and Ecosystems	Students shall demonstrate and apply knowledge of populations and ecosystems using appropriate safety procedures, equipment, and technology.
Physical Science	
5. Matter: Properties and Changes	Students shall demonstrate and apply knowledge of matter, including properties and changes, using appropriate safety procedures, equipment, and technology.
6. Motion and Forces	Students shall demonstrate and apply knowledge of motion and forces using appropriate safety procedures, equipment, and technology.
7. Energy and Transfer of Energy	Students shall demonstrate and apply knowledge of energy and transfer of energy using appropriate safety procedures, equipment, and technology.
Earth and Space Science	
8. Earth Systems	Students shall demonstrate and apply knowledge of Earth's structure and properties using appropriate safety procedures, equipment, and technology.
9. Earth's History: Changes in Earth and Sky	Students shall demonstrate and apply knowledge of Earth's history using appropriate safety procedures, equipment, and technology.
10. Objects in the Universe	Students shall demonstrate and apply knowledge of objects in the universe using appropriate safety procedures, equipment, and technology.

*Each grade level continues to address earlier Student Learning Expectations.

A minimum of 20% of instructional time in science must be spent in inquiry and conducting hands-on investigations. Equipment, training, and grant information are available through the Arkansas Centers for Mathematics and Science Education.

Strand 3: Physical Science

Standard 5: Matter: Properties and Changes

Students shall demonstrate and apply knowledge of matter, including properties and changes, using appropriate safety procedures, equipment, and technology

THE GOAL FOR EACH STUDENT IS PROFICIENCY IN ALL REQUIREMENTS AT CURRENT AND PREVIOUS GRADES

	Grade 5	Grade 6	Grade 7	Grade 8
Properties of Matter	<p>PS.5.5.1 Identify the relationship of atoms to all matter</p> <p>PS.5.5.2 Conduct scientific investigations on physical properties of objects</p> <p>PS.5.5.3 Identify common examples of physical properties:</p> <ul style="list-style-type: none"> length mass area perimeter texture taste odor color elasticity <p>PS.5.5.4 State characteristics of physical changes</p> <p>PS.5.5.5 Identify characteristics and common examples of physical changes</p>	<p>PS.5.6.1 Identify common examples of chemical properties:</p> <ul style="list-style-type: none"> ability to burn ability to produce light ability to react with other substances <p>PS.5.6.2 Compare and contrast characteristics of physical and chemical properties</p> <p>PS.5.6.3 Conduct investigations using acid/base indicators</p> <p>PS.5.6.4 Apply skills of scientific investigation to determine density using SI units</p> <p>PS.5.6.5 Construct a density column using a minimum of four different liquids (e.g., alcohol, colored water, syrup, oil)</p> <p>PS.5.6.6 Use a density column to test the density of various solid objects (e.g., piece of candy, cork, candle, paper clip, egg)</p>	<p>PS.5.7.1 Explain how a small number of naturally-occurring elements can result in the large variety of substances found in the world</p> <p>PS.5.7.2 Create models of common compounds:</p> <ul style="list-style-type: none"> water carbon dioxide salt iron oxide ammonia <p>PS.5.7.3 Identify compounds as substances consisting of two or more elements chemically combined</p> <p>PS.5.7.4 Compare and contrast properties of compounds to those of the elements that compose them:</p> <ul style="list-style-type: none"> salt: sodium, chlorine water: hydrogen, oxygen carbon dioxide: carbon, oxygen 	<p>PS.5.8.1 Compare the atomic theory to the characteristics of a scientific theory</p> <p>PS.5.8.2 Explain the structure of atoms</p> <p>PS.5.8.3 Determine the number of protons, neutrons, and electrons in an atom</p> <p>PS.5.8.4 Create atomic models of common elements</p> <p>PS.5.8.5 Investigate scientists, careers, and historical breakthroughs related to the atomic theory</p>

Physical Science: Matter: Properties and Changes 5-8
 Science Framework Revised 2005
 Arkansas Department of Education

Key: PS.5.5.1 = Physical Science: Standard 5, Grade 5, 1st Student Learning Expectation

Social Studies Curriculum Framework

Strands	Content Standard
Geography	
1. Physical and Spatial	Students shall develop an understanding of the physical and spatial characteristics and applications of geography.
2. Culture and Diversity	Students shall develop an understanding of how cultures around the world develop and change.
3. Interaction of People and the Environment	Students shall develop an understanding of the interactions between people and their environment.
Civics	
4. Government	Students shall develop an understanding of the forms and roles of government.
5. Citizenship	Students shall develop an understanding of the rights and responsibilities of citizens.
6. History	Students shall analyze significant ideas, events, and people in world, national, state, and local history and how they affect change over time.
Economics	
7. Choices	Students shall analyze the costs and benefits of making economic choices.
8. Resources	Students shall evaluate the use and allocation of human, natural, and capital resources.
9. Markets	Students shall analyze the exchange of goods and services and the roles of governments, businesses, and individuals in the market place.

*Each grade level continues to address earlier Student Learner Expectations as needed and as they apply to more difficult text.



This icon indicates Student Learning Expectations that focus on topics in grades K-8 relating to Arkansas and may be used to fulfill the requirements of the Arkansas History Unit for grades K-6 as defined in Act 787 of 1997. This does not meet the 7-12 Arkansas History requirement as defined in Act 787 of 1997. Refer to the Arkansas History for grades 7-8 framework to fulfill this requirement.

Strand: Geography
Standard 1: Physical and Spatial

Students shall develop an understanding of the physical and spatial characteristics and applications of geography.

THE GOAL FOR EACH STUDENT IS PROFICIENCY IN ALL REQUIREMENTS AT CURRENT AND PREVIOUS GRADES

Location, Place, and Region	Grade 5	Grade 6	Grade 7	Grade 8
	<p>G.1.5.1 Classify locations as <i>absolute</i> or <i>relative</i></p> <p>G.1.5.2 Identify and describe the region of the United States in which Arkansas is located</p>	<p>G.1.6.1 Apply the proper usage of <i>absolute</i> and <i>relative location</i></p> <p>G.1.6.2 Examine the location, place, and region of Arkansas and determine the characteristics of each</p> <p>G.1.6.3 Identify the countries on the continent of North America and analyze their geographical relationship</p>	<p>G.1.7.1 Determine the <i>absolute</i> and <i>relative location</i> of a specific place</p> <p>G.1.7.2 Compare and contrast common regional characteristics of Arkansas and other locations at the same latitude on the globe</p> <p>G.1.7.3 Compare the location of North America to the other continents of the world and recognize the significance of the global region of each continent to its geographic location</p> <p>G.1.7.4 Locate the major bodies of water and river systems of countries of the world:</p> <ul style="list-style-type: none"> • Amazon River • Arctic Ocean • Atlantic Ocean • Indian Ocean • Nile River • Pacific Ocean • Panama Canal • Suez Canal 	<p>G.1.8.1 Compare and contrast information about <i>absolute</i> and <i>relative location</i></p> <p>G.1.8.2 Compare and contrast the regional characteristics of Arkansas to other locations</p> <p>G.1.8.3 Evaluate the location of each hemisphere and determine the location of rainforests, deserts, and other major characteristics of global regions on each continent</p> <p>G.1.8.4 Analyze the importance of river systems of countries of the world and determine the unique characteristics of each river system:</p> <ul style="list-style-type: none"> • Amazon River • Ganges River • Mississippi River • Nile River • Volga River • Yangtze River
	<p>G.1.5.4 Locate the major bodies of water that are related to the United States:</p> <ul style="list-style-type: none"> • Atlantic Ocean • Caribbean Sea • Great Lakes • Gulf of Mexico • Pacific Ocean 	<p>G.1.6.4 Explain the importance of the major river systems of the United States and Arkansas:</p> <ul style="list-style-type: none"> • Arkansas River • Colorado River • Mississippi River • Ohio River • St. Lawrence River 		

Geography: Physical and Spatial 5-8
Social Studies Curriculum Framework Revised 2006
Arkansas Department of Education

Key: G.1.5.1 = Geography, Standard 1, Grade 5, 1st Student Learning Expectation

Strand: Physical Education and Leisure
 Standard 3: Lifetime Sports and Recreation

Students shall demonstrate an understanding of the importance and health benefits of participating in lifetime sports and recreation.

THE GOAL FOR EACH STUDENT IS PROFICIENCY IN ALL REQUIREMENTS AT CURRENT AND PREVIOUS GRADES.

	Grade 5	Grade 6	Grade 7	Grade 8
Health Benefits	<p>PEL.3.5.1 Recognize the physical, mental, emotional benefits of participating in regular physical activity:</p> <ul style="list-style-type: none"> • healthy heart • strong muscles • strong bones • healthy lungs • improved self-esteem • better sleep • sick less often • improved ability to focus and concentrate • healthy body composition (healthy weight) 	<p>PEL.3.6.1 Compare and contrast various levels of health related fitness (e.g., low resting heart rate vs. high resting heart rate, high body fat percentage vs. low body fat percentage, strong bones vs. osteoporosis)</p>	<p>PEL.3.7.1 Compare and contrast skill related fitness with health related fitness:</p> <ul style="list-style-type: none"> • while participating in life-time sports and recreation • as an individual ages 	<p>PEL.3.8.1 Analyze the benefits of participating in regular physical activity to reduce chronic disease risks:</p> <ul style="list-style-type: none"> • reduce blood lipids • lower blood pressure • improve weight loss • reduce stress • lessen colon cancer risk • lessen risk for diabetes
Sports and Recreation	<p>PEL.3.5.2 Compare and contrast competitive and lifetime sports</p>	<p>PEL.3.6.2 Explore recreational activities in the community that meet the needs of various skill levels and interests</p>	<p>PEL.3.7.2 Discuss the role that sports and recreation play in career and social environments (e.g., golf, tennis, health clubs)</p>	<p>PEL.3.8.2 Investigate career opportunities available in the field of sports and recreation</p>
Academic Integration	<p>PEL.3.5.3 Understand that beat awareness and beat competency enhance the internal dialogue for better silent reading</p>	<p>PEL.3.6.3 Understand that movement facilitates cognition</p>	<p>PEL.3.7.3 Understand that physical activity forces oxygen and glucose to the brain at greater rates to feed the brain its needed nutrients</p>	<p>PEL.3.8.3 Understand that crossing the mid-line aids in the development of brain circuits needed for learning:</p> <ul style="list-style-type: none"> • improves reading mechanics • improves symbolic recognition for decoding language • increases nerve connections

Health and Wellness: Personal and Social Skills 5-8
 Physical Education and Health Framework Revised 2005
 Arkansas Department of Education

Key: PEL.3.5.1 = Physical Education and Leisure: Standard 3, Grade 5, 1st Student Learning Expectation

Strand: Reading

Standard 10: Variety of texts

Students shall read, examine, and respond to wide range of texts for a variety of purposes.

THE GOAL FOR EACH STUDENT IS PROFICIENCY IN ALL REQUIREMENTS AT PREVIOUS AND CURRENT GRADE.				
		Kindergarten		
Exhibit behaviors and habits of an active reader	R.10.K.1	Read daily		
	R.10.K.2	Read and explain own writing and drawings		
	R.10.K.3	Distinguish different forms of text, such as story or informational		
	R.10.K.4	Demonstrate knowledge of the content of the works of a single author		
	R.10.K.5	Participate actively (react, join in, predict, read along, etc.) when predictable and patterned selections are read aloud		
	R.10.K.6	Respond to a wide variety of texts by contributing to a reading journal/log which demonstrates appropriate comprehension skills, including picture and written responses		

Strand 3: Physical Science
 Standard 5: Matter: Properties and Changes

Students shall demonstrate and apply knowledge of matter, including properties and changes, using appropriate safety procedures, equipment, and technology.

THE GOAL FOR EACH STUDENT IS PROFICIENCY IN ALL REQUIREMENTS AT CURRENT AND PREVIOUS GRADES.

	Grade 3	Timeline	Resources	Activity(s)
Physical Properties	PS.5.3.1 Compare and contrast objects based on two or more properties PS.5.3.2 Demonstrate physical changes in <i>matter</i> PS.5.3.3 Determine the mass of solids			
States of Matter	PS.5.3.4 Compare and contrast solids and liquids			

Physical Science: Motion and Forces K-4
 Science Framework Revised 2005
 Arkansas Department of Education

Strand: Oral and Visual Communication

Standard 1: Speaking

Students shall demonstrate effective oral communication skills to express ideas and to present information.

THE GOAL FOR EACH STUDENT IS PROFICIENCY IN ALL REQUIREMENTS AT PREVIOUS AND CURRENT GRADE.			
	Grade 6		
Speaking Vocabulary	<p>OV.1.6.1 Develop vocabulary from content area texts and personal reading</p> <p>OV.1.6.2 Use standard English in classroom discussion</p> <p>OV.1.6.3 Use appropriate oral communication for various purposes and audiences</p> <p>OV.1.6.4 Demonstrate appropriate eye contact and posture</p> <p>OV.1.6.5 Use correct pronunciation and inflection to communicate ideas and information</p>		
Speaking Behaviors	<p>OV.1.6.6 Contribute appropriately to class discussion</p> <p>OV.1.6.7 Deliver oral presentations using standard English, appropriate vocabulary, and organization</p>		
Speaking to share understanding and information			