

Alternative Science Testing Structure

The testing structure for science reflects both the number of operational assessment items and the number of field test assessment items.

Grade	Administration Window*
3-5	Multiple untimed sessions <ul style="list-style-type: none"> 24 multiple choice items (20 operational items and 4 field test items)

* Teachers may administer the assessment in as many sessions as necessary throughout the entire administration window.

TCAP Grades 3-5 Alternate Science Blueprints 2017-18

The blueprints reflect only operational assessment items.

Grade 3		
Content	# of items	% of test
LS 1: Cells, Flow of Matter & Energy, Heredity	3-5	15-25
0307.3.1	Identify the basic needs of plants and animals.	
0307.4.1	Select an illustration that shows how an organism changes as it develops.	
LS 2: Interdependence, Biodiversity & Change	3-5	15-25
0307.5.1	Investigate an organism's characteristics and evaluate how these features enable it to survive in a particular environment.	
0307.2.1	Distinguish between living and non-living things.	
ES: The Universe, The Earth, The Atmosphere	3-4	15-20
0307.7.4	Determine methods for conserving natural resources.	
0307.8.2	Match major cloud types with specific atmospheric conditions.	
PS 1: Matter and Energy	1-2	5-10
0307.10.1	Use an illustration to identify various sources of heat energy.	
PS 2: Motion, Forces in Nature	6-7	30-35
0307.11.1	Identify how the direction of a moving object is changed by an applied force.	
0307.12.1	Recognize that magnets can move objects without touching them.	
0307.12.2	Identify objects that are attracted to magnets.	

Grade 4		
Content	# of items	% of test
LS 1: Cells, Flow of Matter & Energy, Heredity	3-4	15-20
0407.1.1	Compare basic structures of plant and animal cells.	
0407.4.1	Draw conclusions about the relationship between reproduction and survival of the species.	
LS 2: Interdependence, Biodiversity & Change	2-4	10-20
0407.2.1	Recognize the impact of predation and competition on an ecosystem.	
0307.5.1	Determine how a physical or behavioral adaptation can enhance the chances of survival.	
ES: The Universe, The Earth, The Atmosphere	4-5	20-25
0407.7.1	Design a simple model to illustrate how the wind and movement of water alter the earth's surface.	
0407.7.2	Analyze how different earth materials are utilized to solve human problems or improve the quality of life.	
PS 1: Matter and Energy	4-5	20-25
0407.10.1	Identify different forms of energy, such as heat, light, and chemical.	
0407.10.2	Determine which surfaces reflect, refract, or absorb light.	
PS 2: Motion, Forces in Nature	4-5	20-25
0407.11.2	Identify factors that influence the motion of an object.	
0407.11.3	Determine the relationship between speed and distance traveled over time.	

Grade 5		
Content	# of items	% of test
LS 1: Cells, Flow of Matter & Energy, Heredity	3-4	15-20
0507.3.1	Identify photosynthesis as the food manufacturing process in plants.	
0507.3.2	Compare how plants and animals obtain energy.	
LS 2: Interdependence, Biodiversity & Change	3-4	15-20
0507.2.1	Describe the different types of nutritional relationships that exist among organisms.	
0507.2.3	Use information about the impact of human actions or natural disasters on the environment to support a simple hypothesis, make a prediction, or draw a conclusion.	
ES: The Universe, The Earth, The Atmosphere	4-5	20-25
0507.8.1	Describe the effects of the oceans on weather and climate.	
0507.8.2	Explain how mountains affect weather and climate.	
PS 1: Matter and Energy	4-5	20-25
0507.9.1	Distinguish between physical and chemical properties.	
0507.9.3	Describe factors that influence the rate at which different types of material freeze, melt, or evaporate.	
PS 2: Motion, Forces in Nature	2-4	10-20
0507.12.1	Recognize that the earth attracts objects without touching them.	
0507.12.2	Identify the force that causes an object to fall to the earth.	