![dese MASSACHUSETTS Department of Elementary and Secondary Education]
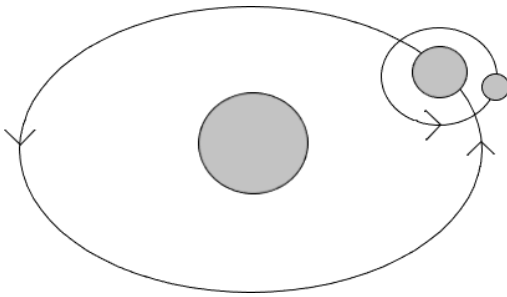
MCAS Grade 5 Science and Technology/Engineering
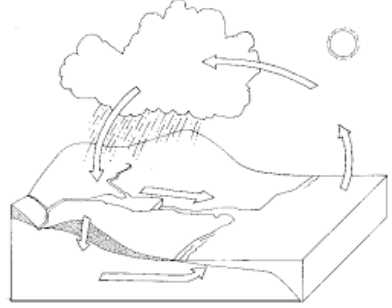## Sample Reference Sheet for Students with this Accommodation

ONLY for use by students on the MCAS STE test who have this accommodation listed in their IEP or 504 plan

Note: Students may NOT use a reference sheet that has already been filled out prior to the beginning of the test administration, and test administrators MUST check to confirm that they are providing students with blank sheets.

Earth and Space Science

The _____ and _____ of a shadow help to predict where the _____ is located in the sky.

Water cycle: **E, C, P, A, R**

How does temperature affect the water cycle?

Climates tell us what about different regions?

	Is caused by…	Changes the land by…
Weathering		
Erosion		
Deposition		

Patterns of volcanoes and earthquakes show _____.

Renewable energy sources: _____

Nonrenewable energy sources: _____

What is the difference? _____

Life Science

What does each part of a plant do?
- Bark
- Flowers
- Fruit
- Leaves
- Seeds
- Stems
- Roots

Plants make _____ using _____, _____, and _____.

Matter Moving:
- Air
- Consumers
- Decomposers
- Producers
- Soil
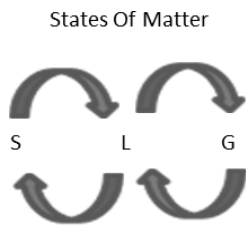- Water

Food Web Arrows point in direction of _____.

Source of energy in a food web: _____

Life Cycle Stages: **B**, **G**, **R**, **D**

Organisms need energy to: _____

Reproduction is important because _____.

A composter _____ and needs
_____ to work.

Fossils are used by scientists to_____.

Physical Science

What causes a phase change?

States Of Matter

S   L   G

Freezing makes a _____.
Melting makes a _____.
Evaporation makes a _____.

Types of energy: **S, L, H, and E**

What happens to an object with balanced
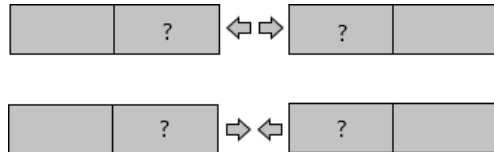forces? _____ or _____

The direction of gravity is toward _____.

Direction of friction on an object: _____

Kinetic energy _____ as speed _____.

When objects collide, _____ is changed
to _____ and _____.

N or S?

| | ? | | | ? | |

| | ? | | | ? | |

Waves carry _____.

The masses of substances before a chemical
reaction is _____ to the masses of
the substances after the reaction.

What is a mixture?

Technology/Engineering

Information can be shown in charts, diagrams,
graphic organizers, lists, and sketches.

Information can be encoded, decoded, sent, or
received.

- Criteria for Success/Constraints
- Design features
- Prototype
- Failure points
- Variables

Practices

What is the Claim?
What is the Evidence?
What is the Reasoning?
Was data asked for in the question? Did you include it in your answer?
If asked to provide a question, is it a testable question?