

# MCAS Grade 5 Science and Technology/Engineering

## Sample Blank Reference Sheet for Students with Accommodation A9

### **INSTRUCTIONS:**

The following sample reference sheet is **ONLY** for students who have accommodation A9 listed in their IEP or 504 plan.

### **Before testing:**

Schools should print out the following pages (or a reference sheet that has been submitted to and approved by the Department) and distribute to students who have accommodation A9 so that students can practice using the reference sheet. Schools should also remind students that during testing they may only use a reference sheet that has not yet been filled in.

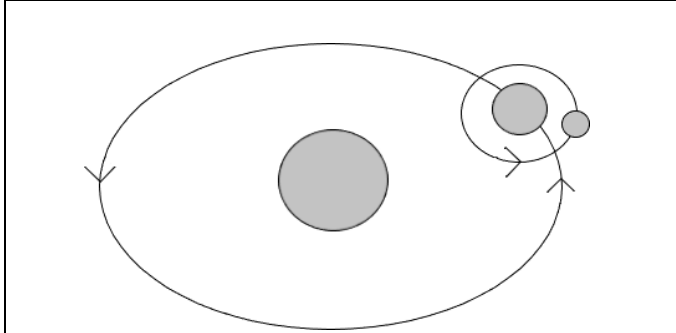
### **During testing:**

At the start of each test session, test administrators should check that that they are only providing reference sheets that have not already been filled in, and that they are providing them only to students who have accommodation A9 in their IEP or 504 plan.

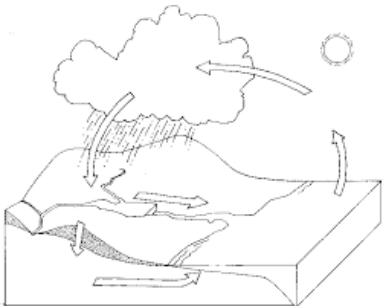
Test administrators should remind students that they may not use any sheets that were filled in previously, nor any other reference materials or notes. Results **may be invalidated** for students who use a reference sheet that has already been filled in.

**Note:** Students may ONLY be provided with a blank reference sheet to use during testing.

**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

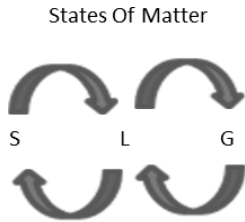
Food Web Arrows point in direction of \_\_\_\_\_.  
Source of energy in a food web: \_\_\_\_\_

Life Cycle Stages: **B, G, R, D**  
Organisms need energy to: \_\_\_\_\_  
Reproduction is important because \_\_\_\_\_.

A compostor \_\_\_\_\_ and needs \_\_\_\_\_ to work.  
Fossils are used by scientists to \_\_\_\_\_.

## Physical Science

What causes a phase change?



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

## Science 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?