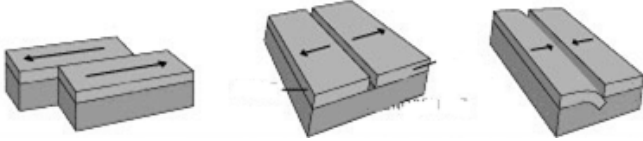
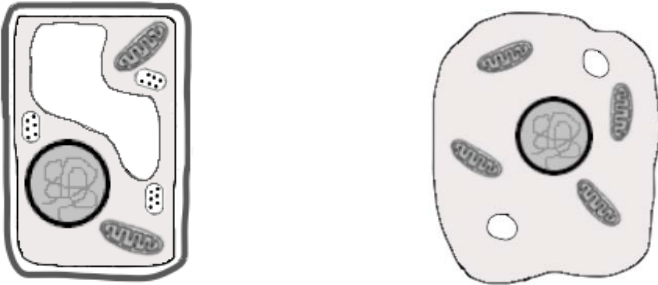


## MCAS Grade 8 Science and Technology/Engineering Sample Reference Sheet for Students with this Accommodation

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

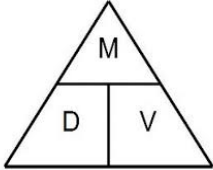
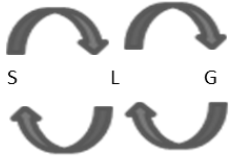
**Note:** Students may NOT use a reference sheet that has already been filled out prior to the beginning of the test administration, and test administrators MUST check to confirm that they are providing students with blank sheets.

Earth Science											
Lunar and Solar Eclipses: What are the positions of Earth, Moon, and Sun?	Seasons result from the _____ and _____ of the Earth. During summer, the Northern hemisphere receives _____ than in the winter.										
Space science: galaxies, planets, solar system, Sun, universe	_____ causes the planets to orbit the _____.										
Plate Boundaries											
The top layer of rock is the _____. The bottom layer of rock is the _____.											
What is evidence of plate movement? How is it evidence?											
What happens when air masses collide?											
Life Science											
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">Type of Organism</th> <th style="padding: 5px;">Characteristics</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Plants</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">Animals</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">Bacteria</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">Fungi</td> <td style="padding: 5px;"></td> </tr> </tbody> </table>	Type of Organism	Characteristics	Plants		Animals		Bacteria		Fungi		<p>Reactants: <b>L, C, W</b> Products: <b>G, O</b></p> <p>Reactants: <b>G, O</b> Products: <b>E, C</b></p>
Type of Organism	Characteristics										
Plants											
Animals											
Bacteria											
Fungi											
Cells											
How do body systems work together? Body systems: Digestive, Respiratory, Excretory, Circulatory, Muscular/Skeletal, Nervous	Types of food molecules: F, P, C Organisms need food molecules to _____ and _____.										

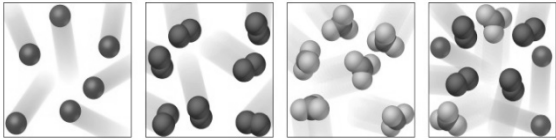
Environmental factors that influence growth of organisms include _____ and _____.	Advantages of sexual reproduction: Advantages of asexual reproduction:
Food Web: P, C, D	A change to a gene is a _____. Genes, alleles, chromosomes

Natural selection is a process where some individuals \_\_\_\_\_ and \_\_\_\_\_ more than other individuals because \_\_\_\_\_.

**Physical Science**

	<p>States Of Matter</p> 
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Methods of Heat Transfer <b>C, C, R</b>	Kinetic energy increases when ____ increases. Potential energy increases when ____ increases.
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<p><b>E M C M</b></p> 	Amplitude, energy, frequency, wavelength Absorb, reflect, refract, transmit
---	--

**Technology/Engineering**

Size, shape, weight, cost Strength, hardness, flexibility	Universal System: inputs, processes, outputs, feedback
Manufacturing: forming, separating, conditioning, assembling, finishing, quality control, safety Transportation: structural, propulsion, guidance, suspension, control Construction: foundation, floor, deck, wall, roof	Tension is a _____ force. Compression is a _____ force. Torsion is a _____ force. Shear is a _____ force.

**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?