

*Important Concepts . . .*

# **Preview Review**



***Science***

***Grade 8***

***W1 - Quiz***

## Important Concepts of Grade 8 Science

## Materials Required

W1 - Lesson 1 .....	Mass, Volume, and Density
W1 - Lesson 2 .....	Solubility and Saturation Points
W1 - Lesson 3A.....	Viscosity, Flow Rate, and Buoyancy
W1 - Lesson 3B.....	Simple Machines
W1 - Lesson 4 .....	Gears, Mechanical Advantage, Speed Ratios, and Efficiency
W1 - Lesson 5 .....	Hydraulics and Pneumatics
W1- Quiz	
W2 - Lesson 1 ....	The Role of Cells within Living Things, Cells-Tissue-Organ System
W2 - Lesson 2 .....	The Microscope
W2 - Lesson 3 .....	Body Systems Part 1
W2 - Lesson 4 .....	Body Systems Part 2
W2 - Lesson 5 .....	Problems Associated with Body Systems
W2 - Quiz	
W3 - Lesson 1 .....	Transmission and Absorption of Light
W3 - Lesson 2 .....	Reflection and Refraction of Light
W3 - Lesson 3A.....	Vision and Lenses
W3 - Lesson 3B..	Water in its Various States Affects Earth's Landforms and Climate
W3 - Lesson 4 .....	Adaptations to Aquatic Ecosystems
W3 - Lesson 5 .....	Water Quality
W3 - Quiz .....	

Textbook:  
*Science in  
Action 8*

Science Grade 8  
Version 5  
Preview/Review W1 - Quiz

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# Preview/Review Concepts for Grade Eight Science



*W1 - Quiz*



## W1 - Quiz

Total \_\_\_ / 19

Formulas:  $D = \frac{m}{v}$      $MA = \frac{OF}{IF}$      $p = \frac{F}{A}$      $SR = \frac{ID}{OD}$      $Efficiency = \frac{MA}{SR} \times 100\%$

Show your work wherever you are problem solving.

1. Fill in each blank with a term from the following list. Not all terms will be used. (7 marks)

pneumatics

solubility

solute

driven gear

unsaturated

mass

weight

hydraulics

saturated

driving gear

solvent

### Mass

- a. If someone tries to add more sugar to a solution but they cannot get it to mix in, the solution is said to be \_\_\_\_\_.
- b. \_\_\_\_\_ is the measure of the amount of matter in an object.
- c. In soft drinks, water is the \_\_\_\_\_, and the flavouring is the \_\_\_\_\_.
- d. When using multiplying gears, the \_\_\_\_\_ gear will have more teeth than the \_\_\_\_\_ gear.
- e. \_\_\_\_\_ use a confined liquid to transmit force.

2. What is the density of a rectangular object with a mass of 50 g and dimensions of 10 cm x 8 cm x 2 cm? (4 marks)

3. How can the solubility of a solute in a particular solvent be increased? (1 mark)

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4. Which is more viscous – water or syrup? Explain. (2 marks)

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5. Imagine a first class lever with an attached 5.0 kg load 1.0 m from the fulcrum. How far from the fulcrum, on the other side would you attach a 10.0 kg load to balance the lever? (2 marks)

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6. What is the mechanical advantage of a system where the input force is 2000N and the output force is 50,000 N? (2 marks)

7. In a hydraulic system, how does the pressure at the input location compare to the pressure at the output location? (1 mark)



