

*Important Concepts . . .*

# Preview Review



***Science***

***Grade 9***

***W1 - Quiz***

## Important Concepts of Grade 9 Science

W1 - Lesson 1 .....	Electrical Principles
W1 - Lesson 2 .....	Electrical Circuits
W1 - Lesson 3A .....	Energy Consumption
W1 - Lesson 3B .....	The Distribution of Matter in Space
W1 - Lesson 4 .....	Objects in Space
W1 - Lesson 5 .....	Optical and Radio Telescopes
W1- Quiz	
W2 - Lesson 1 .....	Physical and Chemical Properties of Materials
W2 - Lesson 2 .....	Chemical Reactions
W2 - Lesson 3 .....	Using the Periodic Table
W2 - Lesson 4 .....	Naming Chemical Compounds
W2 - Lesson 5 .....	Writing Chemical Equations
W2 - Quiz	
W3 - Lesson 1 .....	Variation
W3 - Lesson 2 .....	Reproduction and Patterns of Inheritance
W3 - Lesson 3A .....	Genes and Cell Division
W3 - Lesson 3B .....	Organisms and Matter in their Environment
W3 - Lesson 4 .....	Biological and Chemical Monitoring/Acids and Bases
W3 - Lesson 5 .....	Transfer of Materials through the Air, Ground, and Water/Biological Impacts of Hazardous Chemicals
W3 - Quiz	

## Materials Required

Textbook:  
*Science in Action 9*

Science Grade 9  
Version 5  
Preview/Review W1 - Quiz

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# Preview/Review Concepts for Grade Nine Science



*W1 - Quiz*



**W1 - Quiz**

/30 marks

This quiz should take approximately 20 minutes.

**Part I: Multiple Choice**

Place the letter of the best answer in the blank before each question. (5 marks)

- \_\_\_\_\_ 1. A television is plugged into your household wall socket. What type of power is running through it?
- A. direct current
  - B. alternating current
  - C. reverse current
  - D. static current
- \_\_\_\_\_ 2. Mercury at absolute zero can be identified as a
- A. conductor
  - B. semiconductor
  - C. insulator
  - D. superconductor
- \_\_\_\_\_ 3. Which planet has a similar size and as Earth?
- A. Pluto
  - B. Mars
  - C. Venus
  - D. Mercury
- \_\_\_\_\_ 4. Which planet is the largest in our solar system?
- A. Jupiter
  - B. Neptune
  - C. Uranus
  - D. Saturn
- \_\_\_\_\_ 5. A telescope that uses two lenses to gather and focus starlight is called a
- A. reflecting telescope
  - B. refracting telescope
  - C. radio telescope
  - D. audio telescope

## Part II: Matching

Match the following words to their definitions. (9 marks)

### Words

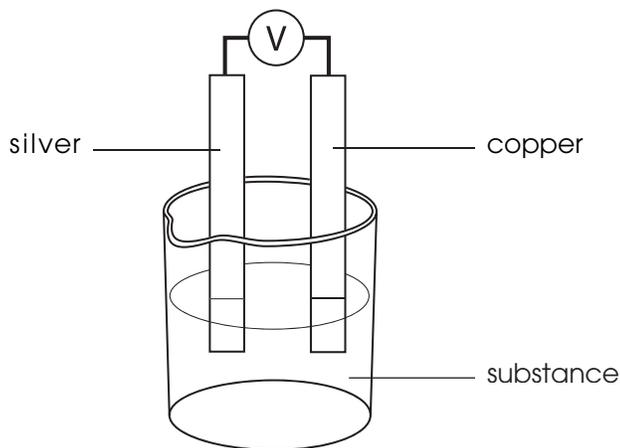
- A. rheostat
- B. thermocouple
- C. galaxy
- D. asteroid
- E. comet
- F. ecliptic
- G. satellite
- H. refracting telescope
- I. reflecting telescope
- J. interferometry
- K. azimuth
- L. altitude

### Definitions

- \_\_\_ a small body that orbits a larger one
- \_\_\_ the path of the sun and planets through the stars as viewed from Earth
- \_\_\_ a type of optical telescope that uses mirrors instead of lenses to gather and focus light
- \_\_\_ small rocky bodies orbiting the Sun and located mainly in a narrow belt between Mars and Jupiter
- \_\_\_ the height of a celestial body above the horizon ranging from 0 at sea level to 90 degrees straight up
- \_\_\_ a grouping of millions or billions of stars, gas, and dust held together by gravity
- \_\_\_ a technique of combining the observations of two or more telescopes to produce images that have a better resolution than what one telescope can produce alone
- \_\_\_ a device consisting of two wires of different metals joined to conduct heat
- \_\_\_ a continuously variable resistor used to regulate electric current

**Part III: Written Response**

1. Use the following diagram to answer the next questions.



a. What type of cell is shown in the diagram? Explain. (2 marks)

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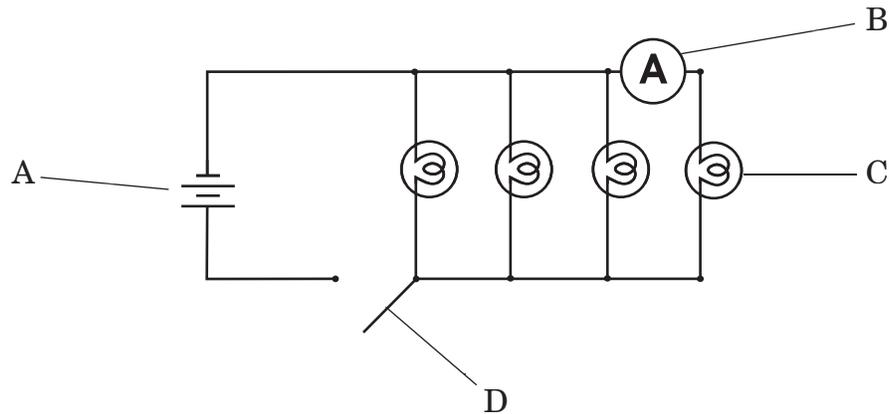
b. Identify a substance that could be in the beaker if electricity is produced. What name best describes this substance? (2 marks)

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2. Use the following diagram to answer the next questions.



a. What type of circuit is shown? (1 mark)

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b. What do the letters on the diagram represent? (1/2 mark each = 2 marks)

A \_\_\_\_\_ B \_\_\_\_\_

C \_\_\_\_\_ D \_\_\_\_\_

c. If we added one more unit of type C, what would happen to the resistance in this circuit? (1 mark)

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3. A circuit has an electrical current flowing through it at 15 amps. The resistance of the circuit is 10 ohms. How much voltage is flowing through this circuit? (2 marks)

4. A stereo is plugged into a 120 V wall socket. If the current flowing through it is 5 amps, what is its power rating? (2 marks)

5. How much energy is being used if a refrigerator with a power rating of 1300 watts runs for 24 hours? (2 marks)

6. Identify and give a brief description of two uses for artificial satellites. (2 marks)

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