SKILLS LIST and SAMPLE ITEMS

FOR

PRACTICE TEST FOR SCIENCE, GRADE 8

(Test items developed for skills measured in OCCT)

Skills

1.0 Observe and Measure
- **1.1 Changes**
- **1.2 Appropriate Tools/SI Units**

2.0 Classify
- **2.1 Observable Properties**
- **2.2 Identify Properties**

3.0 Experimenting
- **3.1 Scientific Investigation**
- **3.2 Variables/Controls**
- **3.3 Hazards and Safety Procedures**

4.0 Interpret and Communicate
- **4.1 Interpret Data**
- **4.2 Evaluate Data**

Crossover Skills

5.0 Physical Change
- **5.1 Chemical Changes**
- **5.2 Physical Properties**
- **5.3 Motion and Forces**

6.0 Life Science
- **6.1 Classification**
- **6.2 Survival**

7.0 Earth and Space Science
- **7.1 Land Forms/Weathering**
- **7.2 Rock Cycle**
- **7.3 Earth's History**
- **7.4 Fossils**

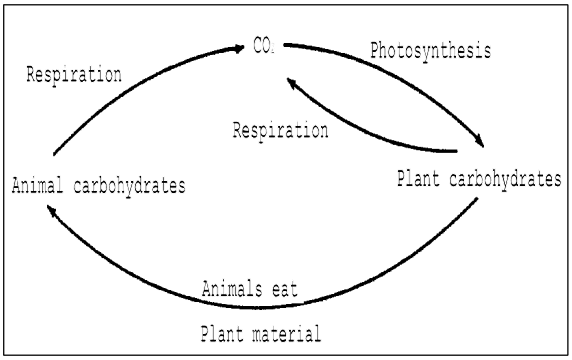
Number of questions: 45
Number of pages: 13

(c) EPES TESTING, INC.

(OVER)

OCCT PRACTICE TEST IN SCIENCE - GRADE 8

Look at the diagram. Then answer the question.



1. The diagram above illustrates the carbon cycle. Plants depend upon the activities of animals for a continuing supply of which substance?

A. Animal carbohydrates
B. Plant carbohydrates
C. Plant material
D. CO_2

Study the following table of elements and their properties and behaviors. Then answer the question.

Element	Appearance	Conducts heat?	Conducts elec-tricity?	Density g/cm^3	Melting Point
A	shiny	yes	yes	13.5	-39°C
B	shiny	yes	yes	19.3	3400°C
C	grey	no	no	5.4	873°C
D	brown	no	some	13.7	765°C

2. Which elements would most likely be grouped together based on similarities?

A. A and B
B. A and C
C. B and C
D. C and D

3. Which of the following is an important lab safety rule?

A. Practice trial-and-error procedures to determine a conclusion.
B. Find the fastest way to complete the experiment.
C. Follow directions exactly as given.
D. Wait until the experiment is complete to report any accidents.

4. You are conducting an experiment to determine if putting an additive in gasoline will improve gas mileage. All cars used are identical. The gasoline used in each car is the same. The car used as the experimental control contains

A. one part gasoline and one part additive.
B. two parts gasoline and one part additive.
C. only additive.
D. only gasoline.

5. Mistletoe, a parasitic plant, has developed a root-like system for living in trees rather than in soil, as do most plants. How does this example illustrate the importance of adaptation?

A. It explains the purpose of roots.
B. It explains the function and structure of leaves.
C. It shows how adaptation allows members of a species to survive under different conditions.
D. It explains the various means by which seeds are disseminated throughout the environment.