

SCIENCE 10 — EXEMPLARS FOR QUESTION STYLES

Some specialized styles of multiple-choice and matching questions are included in the Science 10 Examination. In this section of the *Examination Specifications* sample questions are provided so students and teachers can become familiar with the nuances of each style.

- A. Matching
- B. Quantitative Comparison Multiple Choice
- C. Interpretive Exercise Multiple Choice
- D. Rank Order Multiple Choice

A. Matching

Matching questions test a student's ability to distinguish a relationship between a term and a concept.

The bubble sheet will accommodate six letters of answers in a row as shown here.

1. (A) (B) (C) (D) (E) (F)
2. (A) (B) (C) (D) (E) (F)
3. (A) (B) (C) (D) (E) (F)
4. (A) (B) (C) (D) (E) (F)
5. (A) (B) (C) (D) (E) (F)

Understanding

Prescribed Learning Outcomes – 10E3, 10E4, 10E5

For each Device on the left, choose the Quantity it measures on the right. Each Quantity may be used as often as necessary.	
Device	Quantity
1. ammeter	A. resistance
2. voltmeter	B. energy
3. ohmmeter	C. static electric charge
4. residential electricity meter	D. radiation
5. electroscope	E. current
	F. voltage

Answers

1. (A) (B) (C) (D) (E) (F)
2. (A) (B) (C) (D) (E) (F)
3. (A) (B) (C) (D) (E) (F)
4. (A) (B) (C) (D) (E) (F)
5. (A) (B) (C) (D) (E) (F)

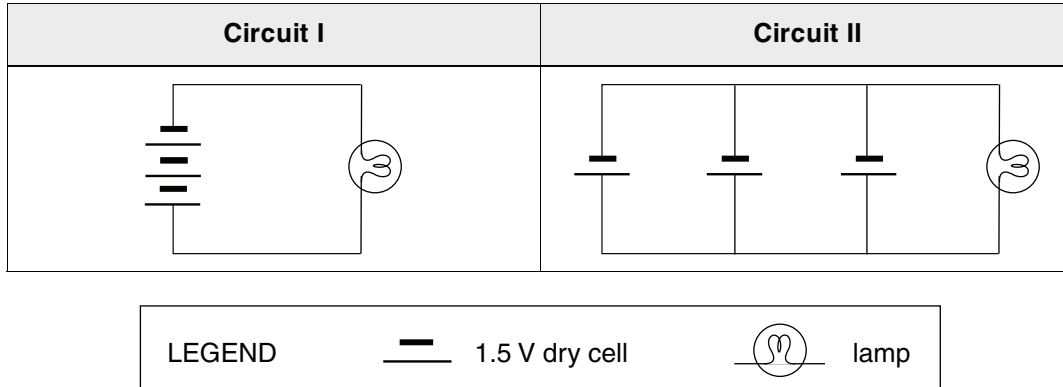
B. Quantitative Comparison Multiple Choice

This style of question tests content as well as a student's ability to analyse quantitatively.

Understanding

Prescribed Learning Outcomes – 10E4

Use the following circuit diagrams to answer question 6.



6. Which of the following statements is correct in terms of the brightness of the lamp?

- * A. Circuit I will produce a brighter lamp.
- B. Circuit II will produce a brighter lamp.
- C. Both circuits will produce the same brightness.
- D. The relationship cannot be determined from the information given.

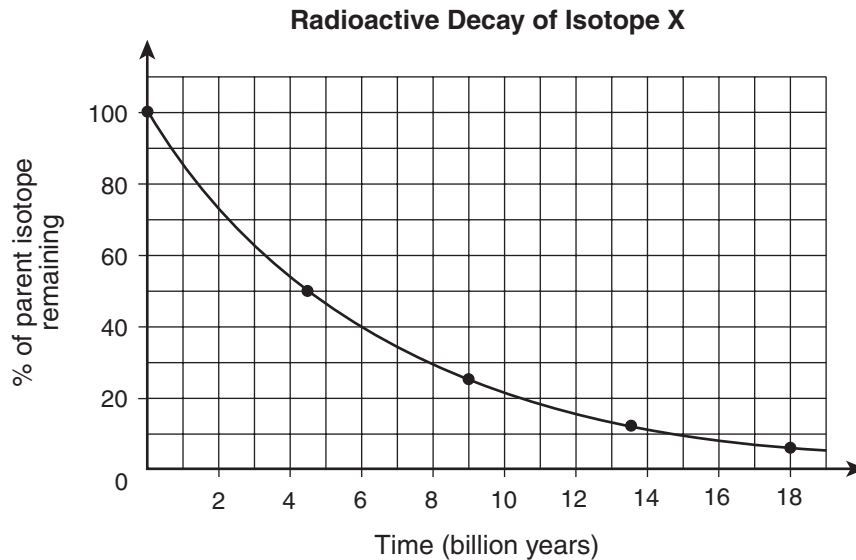
C. Interpretive Exercise Multiple Choice

This style of question tests a student's ability to interpret information presented in a diagram, graph or written passage.

Understanding

Prescribed Learning Outcomes – 10G3, 10F4, 10A4

Use the following information to answer questions 7 to 10.



7. The element has a half-life of 4.5 billion years.
- * A. The statement is supported by the graph.
 - B. The statement is refuted by the graph.
 - C. The statement is neither supported nor refuted by the graph.
8. There is only 40% of the original sample after 6 billion years.
- * A. The statement is supported by the graph.
 - B. The statement is refuted by the graph.
 - C. The statement is neither supported nor refuted by the graph.
9. After 2 billion years, there is less than half the original sample left.
- A. The statement is supported by the graph.
 - * B. The statement is refuted by the graph.
 - C. The statement is neither supported nor refuted by the graph.
10. This graph suggests that isotope X was found in a meteorite.
- A. The statement is supported by the graph.
 - B. The statement is refuted by the graph.
 - * C. The statement is neither supported nor refuted by the graph.

D. Rank Order Multiple Choice

This style of question tests a student's ability to sequence an event or concept.

Higher Mental Process

Prescribed Learning Outcomes – 10C2

11. For the gene that controls height in a pea plant, the tall allele (T) is dominant while the short allele (t) is recessive. Four crosses were attempted. Arrange these crosses from the lowest probability to the highest probability of producing short pea plant offspring.

I	$Tt \times Tt$
II	$tt \times tt$
III	$Tt \times tt$
IV	$TT \times Tt$

		Lowest probability	—————→	Highest probability	
*	A.	IV	I	III	II
	B.	IV	III	I	II
	C.	II	III	I	IV
	D.	II	I	III	IV