

Functional Independence

Fall 2012



Science

Item Descriptors

Grade 8

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DIRECTIONS: Read each question. Choose the **BEST** answer for each question.

- 1 P.ME.FI.EB.IV.1.m.1a:**
Describe and compare objects in terms of weight and width

Based on the illustrations, identify the pair of plants having equal amounts of a physical characteristic

- A** selects a pair with unequal amounts of the characteristic
- B** selects a pair with unequal amounts of the characteristic
- C** selects the pair having equal amounts of the characteristic

- 2 R.RO.FI.EB.II.1.e.3ADDm:**
Identify and/or describe ways in which technology is used in everyday life

Recognize which of 3 listed electronic devices enables a person to accomplish a specified task

- A** selects a device that could provide access to the necessary technology but does not enable task completion
- B** selects the device that enables a person to complete the specified task
- C** selects a device that does not enable a person to complete the specified task

- 3 C.CN.FI.EB.I.1.m.3a:** Identify and/or use tools and equipment appropriate to scientific investigations

Recognize the appropriate tool to use to accomplish a specified task

- A** selects a tool that would not enable a person to complete the specified task
- B** selects a tool that is appropriate for use to complete the specified task
- C** selects a tool that would not enable a person to complete the specified task

- 4 L.CE.FI.EB.III.1.m.1a:**
Recognize that all living things are made of cells

Distinguish plant cells from other types of cells

- A** selects cells that are not plant cells
- B** selects the drawing that represents plant cells
- C** selects cells that are not plant cells

- 5 L.OR.FI.EB.III.2.m.1a:**
Compare and/or classify organisms in major groups based on their structure
- Given 3 drawings of different organisms, recognize which organism is a specified type
- A** selects an organism that is not an example of the specified type
 - B** selects the drawing that is an example of the specified type of organism
 - C** selects an organism that is not an example of the specified type
- 6 L.OR.FI.EB.III.2.m.1a:**
Compare and/or classify organisms in major groups based on their structure
- Recognize which animal is an example of a specified animal classification
- A** selects an animal not included within the specified classification
 - B** selects an animal not included within the specified classification
 - C** selects the animal that is a member of the specified animal classification

- 7 L.OR.FI.EB.III.2.m.2a:**
Identify stages of the life cycle of flowering plants
- Based on a procedure list, recognize the step in the procedure that follows the step illustrated by the drawing
- A** selects a step that precedes the step illustrated by the drawing
 - B** selects a step that is beyond the step that follows the step illustrated by the drawing
 - C** selects the step in the procedure that immediately follows the step illustrated by the drawing

- 8 L.OR.FI.EB.III.2.m.2a:**
Identify stages of the life cycle of flowering plants

Identify the process a flowering plant, in a specified life-cycle stage, follows to proceed with its development

- A** does not correctly identify the process the plant, in its specified life-cycle stage, follows
- B** recognizes the process that the plant, in this stage of its life-cycle, follows to proceed with its development
- C** does not correctly identify the process the plant, in its specified life-cycle stage, follows

- 9 L.OR.FI.EB.III.2.m.4a:**
Identify how selected systems and processes work together in animals

Recognize which body system primarily carries out the specified purpose

- A** selects a body system that is not primary for the specified purpose
- B** selects a body system that is not primary for the specified purpose
- C** selects the body system that primarily carries out the specified purpose

- 10 L.OR.FI.EB.III.2.m.3a:**
Explain where plants make and store food

Recognize which part of a specified plant is used to store its food

- A** selects a plant part that does not primarily store food
- B** selects the plant part where food is primarily stored
- C** selects a plant part that does not primarily store food

- 11 L.OR.FI.EB.III.2.m.3a:**
Explain where plants make and store food

Recognize which part of a specified plant is used to store its food

- A** selects a plant part that does not primarily store food
- B** selects a plant part that does not primarily store food
- C** selects the plant part where food is primarily stored

12 R.RO.FI.EB.II.1.m.2a:

Recognize limitations in personal knowledge

Classify the type of scientific information provided by a given statement

- A** selects the correct type of scientific information provided by the statement
- B** selects a type of scientific information not provided by the statement
- C** selects a type of scientific information not provided by the statement

14 L.EV.FI.EB.III.4.m.1a:

Explain how fossils provide evidence about the nature of ancient life

Recognize the best reason to explain how dinosaurs became extinct

- A** selects a statement not supported by evidence
- B** selects a reason that would not lead to extinction of all dinosaurs
- C** selects the most tenable statement for dinosaur extinction

13 L.EV.FI.EB.III.4.m.1a:

Explain how fossils provide evidence about the nature of ancient life

Recognize scientific facts that are based on fossil evidence

- A** selects a past process for which fossils do not provide evidence
- B** selects a past process for which fossils do not provide evidence
- C** selects the scientific facts that can be derived from fossils

15 L.EC.FI.EB.III.5.m.5a:

Identify how humans use and benefit from plant and animal materials

Given 3 drawings of different products, recognize the product that is made from two types of organisms

- A** selects the product that can be made from both types of organisms
- B** selects the product made from just 1 type of organism
- C** selects the product made from just 1 type of organism

16 L.EC.FI.EB.III.5.m.2a:
Identify and/or describe that organisms acquire energy directly or indirectly from sunlight

Distinguish a producer organism among consumer organisms

- A** selects the organism that is a producer
- B** selects an organism that is a consumer
- C** selects an organism that is a consumer

17 L.EC.FI.EB.III.5.m.1a:
Describe common patterns of relationships among populations

Recognize a relationship between organisms in a food chain under a specified condition

- A** selects a condition not likely to occur based on the specified condition
- B** selects the condition likely to occur for the predator population
- C** selects a condition not likely to occur based on the specified condition

18 L.EC.FI.EB.III.5.m.5a:
Identify how humans use and benefit from plant and animal materials

Recognize type of Earth resource used by human beings to produce the listed products

- A** selects a resource that does not provide material to make the products
- B** selects the resource that provides the raw material used to make the products
- C** selects a resource that does not provide material to make the products

19 P.ME.FI.EB.IV.1.m.1a:
Describe and compare objects in terms of weight and width

Based on the illustration, determine if 1 object weighs more than another object

- A** selects an incorrect conclusion about the weight of the 2 objects
- B** selects an incorrect conclusion about the weight of the 2 objects
- C** selects the correct conclusion about the weight of the 2 objects

20 P.ME.FI.EB.IV.1.m.2a:

Identify when length, weight, area, volume, or temperature is appropriate to describe objects or substances

Recognize which property of a substance is measured using the specified tool

- A** selects a property of a substance not measured by the tool
- B** selects the property of a substance measured by the specified tool
- C** selects a property of a substance not measured by the tool

21 P.ME.FI.EB.IV.1.m.2a:

Identify when length, weight, area, volume, or temperature is appropriate to describe objects or substances

Recognize the correct measure required to carry out a specified task

- A** selects an incorrect measure for the specified task
- B** selects the correct measure which provides the necessary information for the specified task
- C** selects an incorrect measure for the specified task

22 C.CN.FI.EB.I.1.m.1a: Identify and/or generate questions about the world based on observation

Recognize how a measure changes for a specified situation

- A** selects a measured change in the opposite direction of the specified change
- B** selects a measured change in the opposite direction of the specified change
- C** selects the measured change that meets the specified change conditions

23 P.ME.FI.EB.IV.1.m.6a:

Investigate electrical devices, using instructions and appropriate safety precautions

Recognize best safety precautions when working with electricity

- A** selects an action that is unrelated to electrical safety
- B** selects the best action to assure safety when working with electricity
- C** selects an action that does not provide the best safety when working with electricity

24 P.ME.FI.EB.IV.1.m.5a:

Construct simple circuits and/or identify how they work in terms of the flow of current

Recognize examples of complete and incomplete circuits

- A** selects an incorrect example of a complete circuit
- B** selects the correct example of a complete circuit
- C** selects an incorrect example of a complete circuit

25 P.ME.FI.EB.IV.1.m.6a:

Investigate electrical devices, using instructions and appropriate safety precautions

Identify the appropriate behavior for using a specified type of electrical equipment

- A** selects an inappropriate behavior for safety using the specified equipment
- B** selects appropriate behavior for safety using the specified equipment
- C** selects an inappropriate behavior for safety using the specified equipment

26 P.CM.FI.EB.IV.2.m.1a:

Describe common physical changes in matter

Recognize the physical change that occurs in a specified substance as temperature changes

- A** selects the change that does occur in the substance as temperature changes
- B** selects a change that involves such a minute amount of matter as to not be perceptible
- C** selects a change that is the opposite of what will occur as temperature changes

27 P.CM.FI.EB.IV.2.m.4a:

Identify common energy transformations in everyday situations

Recognize which component is necessary for a physical change to occur

- A** selects a component that is not necessarily applicable for a physical change
- B** selects the component that is necessary in the situation for a physical change in matter to occur
- C** selects a component that is not necessarily applicable for a physical change

28 P.CM.FI.EB.IV.2.m.1a:

Describe common physical changes in matter

Recognize the process by which matter changes state in the specified situation

- A** selects a process that would not result in the matter disappearing
- B** selects the process by which the matter disappeared from the focus of the specified situation
- C** selects a process that would not result in the matter disappearing

29 P.MO.FI.EB.IV.3.m.2a:

Identify forces (push/pull) that speed up, slow down, stop, or change the direction of moving objects

Recognize the relationship between an object's weight and the force of gravity

- A** selects an object representing a misconception regarding the relationship
- B** selects an object representing a misconception regarding the relationship
- C** selects the object representing a correct understanding of the relationship

30 P.MO.FI.EB.IV.3.m.3a:

Identify and/or describe patterns of interaction of magnetic materials

Given magnets experiencing a specified type of force, choose the description of the expected result

- A** selects the correct description
- B** selects a description that has nothing to do with magnetic movement
- C** selects a description that is the opposite result of specified force

31 P.MO.FI.EB.IV.3.m.5a:
Identify which simple machine is best used in a given situation

Recognize the type of simple machine used and described in the drawing provided

- A** selects a simple machine that is not described or used in the drawing
- B** selects the simple machine used as displayed and described in the drawing
- C** selects a simple machine that is not described or used in the drawing

32 P.WV.FI.EB.IV.4.m.1a:
Recognize how sounds travel through different media

Recognize the difference in sound intensity among different sound sources

- A** selects a sound not having the greatest intensity at its source
- B** selects a sound not having the greatest intensity at its source
- C** selects the sound that has the greatest intensity at its source

33 E.GE.FI.EB.V.1.m.1a: Identify and/or describe major features of the earth's surface using maps

Based on a map, recognize the Earth-surface feature that is at most of Michigan's borders

- A** selects the Earth surface feature that borders most of Michigan
- B** selects an Earth surface feature that does not border Michigan
- C** selects an Earth surface feature that does not border Michigan

34 E.GE.FI.EB.V.1.m.2a: Identify and/or describe major events in the rock cycle

Recognize the process that produces the specified Earth surface change

- A** selects the process that produces the specified Earth surface change
- B** selects a process that does not produce the specified Earth surface change
- C** selects a process that does not produce the specified Earth surface change

35 E.HY.FI.EB.V.2.m.2a: Explain the behavior of surface water

Identify the process by which liquid water changed its state of matter in the specified situation

- A** selects the process by which the water changed its state of matter
- B** selects a process by which water did not change its state of matter in the specified situation
- C** selects a process by which water did not change its state of matter in the specified situation

36 E.HY.FI.EB.V.2.m.4a: Identify sources of pollution in water

Recognize the pollution consequence of the specified action between 2 different bodies of water

- A** selects an unlikely but possible consequence that does not pollute
- B** selects a likely consequence of how material from 1 body of water could pollute another body of water
- C** selects an unlikely consequence that would be considered an accident and not pollution

37 E.SS.FI.EB.V.4.m.1a: Compare and contrast characteristics of the earth and other planets

Recognize planetary conditions necessary for life as we know and understand it

- A** selects a condition on a planet not apparently necessary for life
- B** selects a condition on a planet not apparently necessary for life
- C** selects the condition on a planet that is necessary for life as we know it

38 E.SS.FI.EB.V.4.m.2a: Demonstrate a basic and general awareness about the motion of the earth

Recognize a feature of the Sun when compared to the same feature of other objects in its solar system

- A** selects an incorrect statement about the Sun's feature
- B** selects the correct statement about the Sun's feature compared to the same feature of other solar-system objects
- C** selects an incorrect statement about the Sun's feature

39 E.AW.FI.EB.V.3.m.1a:
Interpret temperature,
precipitation, and cloud cover
information

Recognize the purpose of a
specified weather measurement
tool

- A** selects information
not provided by the
measurement tool
- B** identifies the information
about a weather condition
that the measurement tool
provides
- C** selects information
not provided by the
measurement tool

40 E.AW.FI.EB.V.3.e.2ADDm:
Identify and/or describe
seasonal changes in Michigan's
weather

Identify the season of the
year most associated with
occurrence of the specified
weather condition

- A** selects the season during
which the specified
weather condition is most
likely to occur
- B** selects a season during
which the specified
weather condition is less
frequent
- C** selects a season during
which the specified
weather condition is less
frequent



Michigan Department of Education
Bureau of Assessment and Accountability
608 West Allegan Street
P.O. Box 30008
Lansing, MI 48909
(877) 560-8378
www.mi.gov/mi-access