Name:_____ Block: _____ Date: _____

7th Grade Unit 1 Checkpoint Assessment – 56 pts

Multiple Choice - 1 pt ea
Identify the choice that best completes the statement or answers the question.

____ 1. The conversion factor for changing one unit of length to another in the metric system is a multiple of:
a. 3.
b. 10.
c. 12.
d. 5,280.

____ 2.

The downward curve of water in a graduated cylinder is called:
a. a meniscus.
b. a flask.
c. a cylinder bubble.
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____ 3. Which of the following statements about theories is CORRECT?
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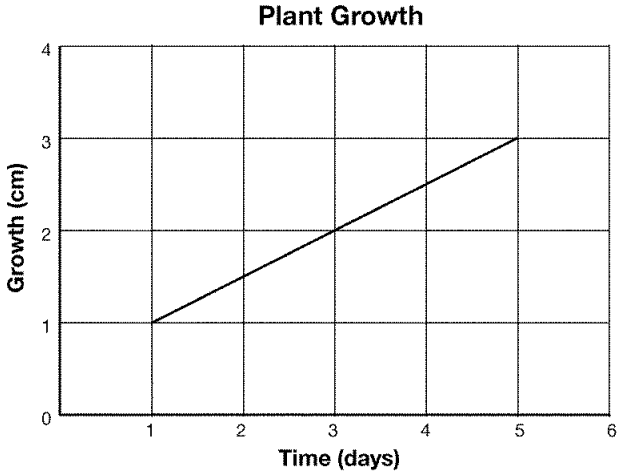

Figure 1-1A

____ 4. The plant growth graph in Figure 1-1A shows a(n):
a. direct relationship.
b. inverse relationship.
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d. None of the above

Name:_____ Block: _____ Date: _____

____ 5. Over several weeks, students calculated the mass of a plant. Each week they observed that the plant's mass increased. They concluded that ____ had occurred.
   a. reproduction
   b. growth
   c. homeostasis
   d. a stimulus

____ 6. Which of the following is an **organism**?
   a. Your heart
   b. A catfish
   c. A flock of birds
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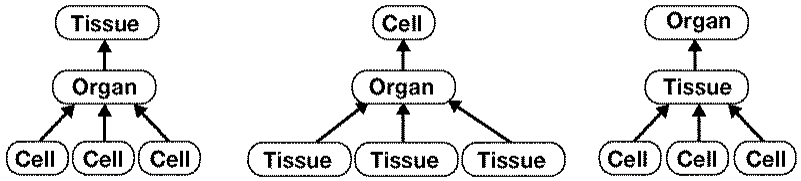

A B C

____ 7. Which diagram shows the correct **levels of organization** in a multicellular organism?
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____ 8. When the body fights off an infection its normal temperature may increase. When this happens, we know a disruption in ____ has occurred.
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   b. cell division
   c. living systems
   d. reproduction

____ 9. Of the following examples, which best shows a **response** to a **stimulus**?
   a. You sneeze when you get pepper up your nose.
   b. Your body uses energy from the food you eat.
   c. You are much larger in size than when you were born.
   d. Your heart is made up of specialized cells.

____ 10. The process of classifying and identifying living things is called:
   a. photosynthesis.
   b. Linnaeusism.
   c. taxonomy.
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____ 11. Why are organisms given scientific names?
   a. To differentiate between living and nonliving animals
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Name:_____ Block: _____ Date: _____

c. To use more descriptive Latin and Greek words
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____ 12. You discover a living organism that is **multicellular**, a **consumer** and is made up of **eukaryotic cells**. You would classify this organism in the Kingdom:
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b. Plantae.
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____ 13. If "quercus" is the genus name and "rubrus" is the species name for a red oak tree, which is the most correct written form of the red oak tree's scientific name?
a. *rubrus quercus*
b. *Rubrus quercus*
c. *Quercus rubrus*
d. *Quercus Rubrus*

Use the dichotomous key below to identify these different species of birds.

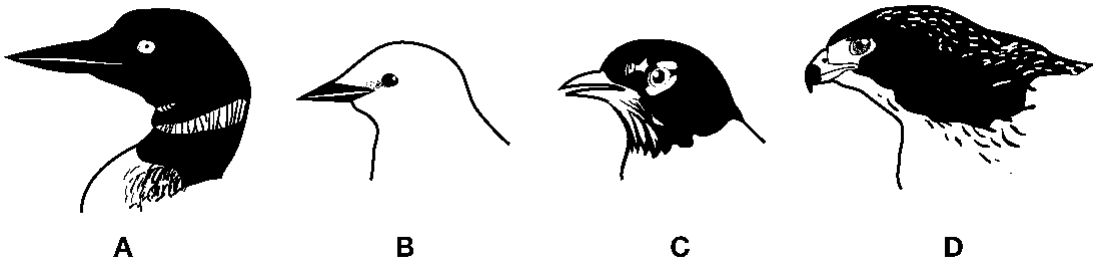

Figure 3-1A

1. Head dark-colored.....go to step 2
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2. Beak straight.....go to step 3
   Beak curved.....Red tailed hawk

3. Beak dark-colored.....Common loon
   Beak light-colored.....American robin

____ 14. Which bird in Figure 3-1A is the **Red tailed hawk**?
a. A
b. B
c. C
d. D

____ 15. Which bird in Figure 3-1A is the **Common loon**?
a. A
b. B
c. C
d. D

Name:_____ Block: _____ Date: _____

____ 16. A(n) ____ is the **simplest** form of matter.
a. Cell
b. Element
c. Molecule
d. compound

____ 17. Water supports life for all the following reasons EXCEPT:
a. it has a high specific heat.
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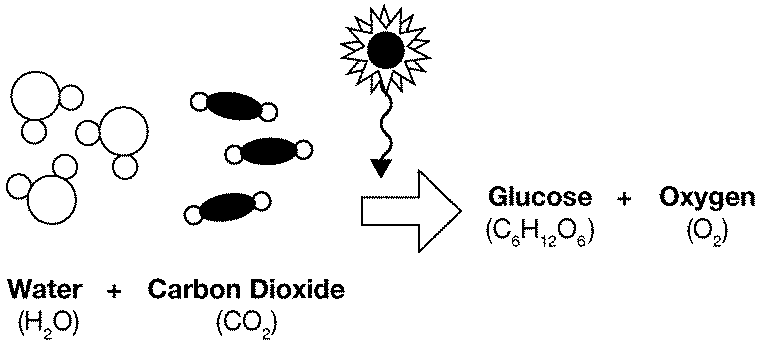

Figure 4-1A

____ 18. Figure 4-1A shows a chemical reaction. In this chemical reaction, glucose is:
a. a product.
b. a reactant.
c. a form of energy.
d. a lipid.

____ 19. Most of the compounds that make up life contain the element:
a. sulfur.
b. phosphorus.
c. carbon.
d. oxygen.

____ 20. ____ are energy-rich compounds that include fats, oils, and waxes.
a. Proteins
b. Sugars
c. Nucleic acids
d. Lipids

____ 21. ____ are energy-rich compounds, such as starch, glucose, and sucrose.
a. Proteins
b. Acids
c. Carbohydrates
d. Water molecules

Name:_____ Block: _____ Date: _____

____ 22. ____ are made from smaller molecules called amino acids.
a. Proteins
b. Carbohydrates
c. Lipids
d. Starches

____ 23. Foods such as ____ contain starch.
a. eggs and meat
b. peanut butter, nuts, and beans
c. rice, potatoes, and bread
d. milk, cheese, and yogurt

____ 24. One of the functions of enzymes in the body is to:
a. store energy.
b. insulate.
c. make up the outer membrane of a cell.
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Completion - 1 pt
Complete each statement.

Write the correct term to complete the sentence.

25. DNA is an example of a(n) _____, that contains the information cells need to make proteins.

Short Answer -

26. List the steps that scientists use to answer questions or solve problems. You may draw arrows connecting the steps. **5 pts**

Name:_____ Block: _____ Date: _____

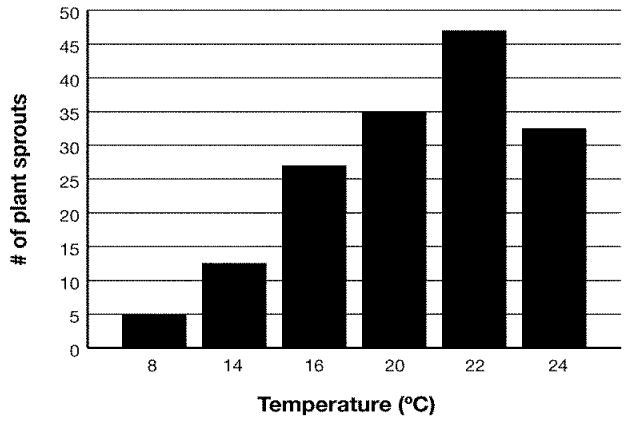

Figure 1-1 shows the effect of temperature on plant growth.

27. According to Figure 1-1, what temperature is best for the plant growth? Explain why you chose that temperature. **2 pts**

28. What is the **independent variable** for the graph in Figure 1-1? **1 pt**

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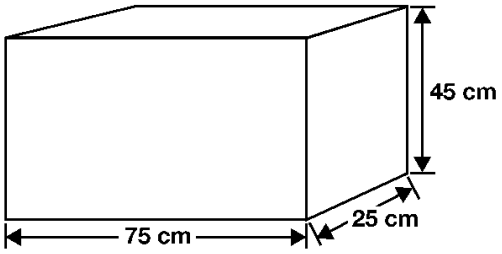
Name:_____ Block: _____ Date: _____

31. One system of classification groups all living things into one of six kingdoms.

    a. Name the 6 kingdoms used to classify living organisms. – **6 pts**
    b. Name 1 example organism for each kingdom. – **6 pts**

32. List 5 characteristics of ALL living things. **5 pts**

Problem

33. 

    You just got a new fish tank and you need to determine the maximum volume that the tank can hold before you set it up. The dimensions of your tank are 75 cm × 25 cm × 45 cm. What is the volume of your new tank? Show how you got your answer. **2 pts**

Name:_____ Block: _____ Date: _____

7th Grade Unit 1 Checkpoint Assessment KEY – 56 pts

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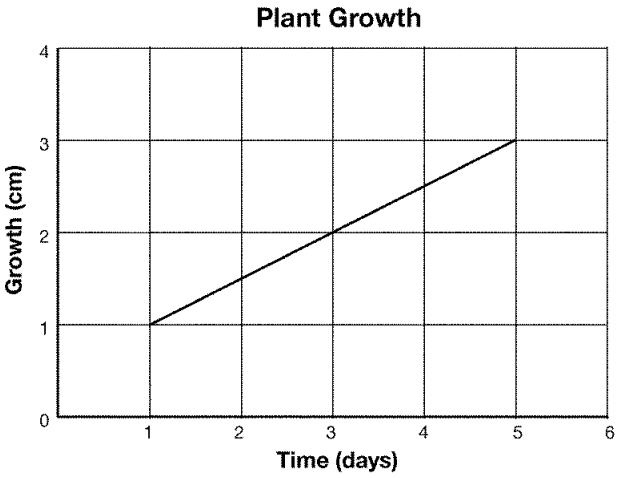

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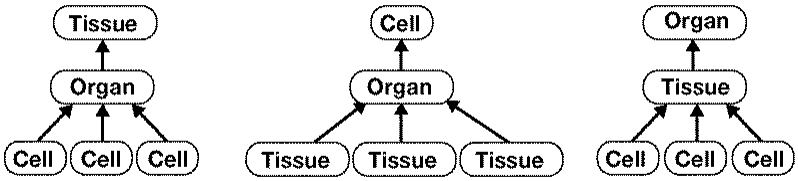

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Name:_____ Block: _____ Date: _____

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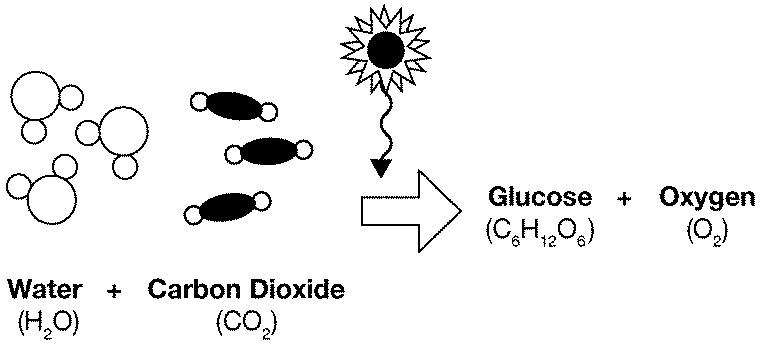

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b. Sugars
c. Nucleic acids
d. Lipids

__C__ 21. ____ are energy-rich compounds, such as starch, glucose, and sucrose.
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b. Acids
c. Carbohydrates
d. Water molecules

Name:_____ Block: _____ Date: _____

__A__ 22. ____ are made from smaller molecules called amino acids.
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__C__ 23. Foods such as ____ contain starch.
a. eggs and meat
b. peanut butter, nuts, and beans
c. rice, potatoes, and bread
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__D__ 24. One of the functions of enzymes in the body is to:
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Completion - 1 pt
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25. DNA is an example of a(n) ___**nucleic acid**_____, that contains the information cells need to make proteins.

Short Answer -

26. List the steps that scientists use to answer questions or solve problems. You may draw arrows connecting the steps. **5 pts**

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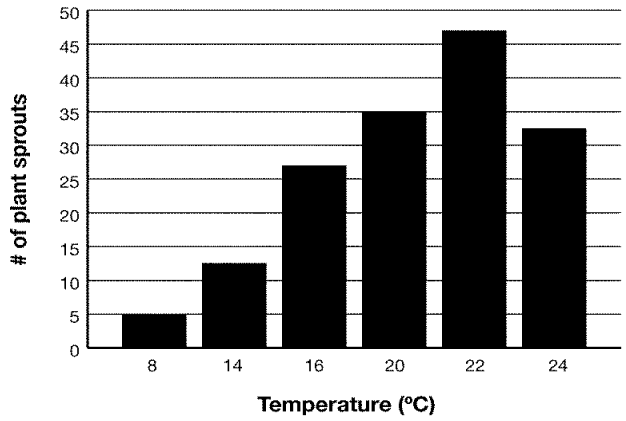


Figure 1-1 shows the effect of temperature on plant growth.

27. According to Figure 1-1, what temperature is best for the plant growth? Explain why you chose that temperature. **2 pts**

22°C, because the most plants sprouted at that temperature.

28. What is the **independent variable** for the graph in Figure 1-1? **1 pt**

Temperature.

29. What is the **dependent variable** for the graph in Figure 1-1? **1 pt**

Number of plant sprouts.

30. What type of **control variables** would be necessary for a successful experiment to produce the graph in Figure 1-1? List at least three. **3 pts**

Same type of plants
same amount of water
same soil
same amount of light
same location, etc.

Name:_____ Block: _____ Date: _____

31. One system of classification groups all living things into one of six kingdoms.

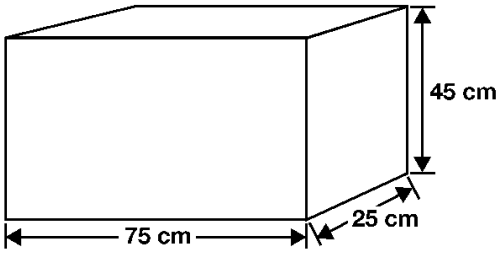
a. Name the 6 kingdoms used to classify living organisms. – **6 pts**
b. Name 1 example organism for each kingdom. – **6 pts**

Kingdom Plantae - grass, tree, algae
Kingdom Animalia - bird, fish, reptile, insect, mammal
Kingdom Protista - slime molds, euglenoids, amoeba, paramecium
Kingdom Fungi - yeast, mushrooms, bread mold,
Kingdom Eubacteria - true bacteria; many infections and diseases are caused by bacteria
Kingdom Archaebacteria - primitive bacteria found in hot springs or deep sea vents Thermophiles, Halophiles, etc

32. List 5 characteristics of ALL living things. **5 pts**

1. **Reproduce**
2. **Respond to stimuli**
3. **Use energy**
4. **Are made of cells**
5. **Grow and develop**
6. **Exchange Gases**
7. **Excrete Wastes**

Problem

33. 

You just got a new fish tank and you need to determine the maximum volume that the tank can hold before you set it up. The dimensions of your tank are 75 cm × 25 cm × 45 cm. What is the volume of your new tank? Show how you got your answer. **2 pts**

84,375 cm^3

Volume = length × width × height

Volume = 75 cm × 25 cm × 45 cm = 84,375 cm^3

Name:_____ Block: _____ Date: _____

7th Grade Unit 1 Checkpoint Assessment
Answer Section

MULTIPLE CHOICE

1.	ANS: B	PTS: 1	DIF:	basic	REF:	section 1.1	STANDARD: 5.1.8.A.2
2.	ANS: A	PTS: 1	DIF:	basic	REF:	section 1.1	STANDARD: 5.1.8.A.2
3.	ANS: B	PTS: 1	DIF:	basic	REF:	section 1.2	STANDARD: 5.1.8.A.3
4.	ANS: A	PTS: 1	DIF:	intermediate	REF:	section 1.3	STANDARD:5.1.12.D.2
5.	ANS: B	PTS: 1	DIF:	intermediate	REF:	section 2.1	STANDARD: 5.3.4.A.1
6.	ANS: B	PTS: 1	DIF:	intermediate	REF:	section 2.1	STANDARD: 5.3.4.A.1
7.	ANS: C	PTS: 1	DIF:	intermediate	REF:	section 2.2	STANDARD: 5.3.8.A.1
8.	ANS: A	PTS: 1	DIF:	advanced	REF:	section 2.2	STANDARD: 5.3.6.A.1
9.	ANS: A	PTS: 1	DIF:	advanced	REF:	section 2.2	STANDARD: 5.3.4.A.1
10.	ANS: C	PTS: 1	DIF:	basic	REF:	section 3.1	STANDARD: 5.1.8.A.1
11.	ANS: D	PTS: 1	DIF:	intermediate	REF:	section 3.1	STANDARD: 5.1.8.A.1
12.	ANS: C	PTS: 1	DIF:	advanced	REF:	section 3.1	STANDARD: 5.1.8.A.1
13.	ANS: C	PTS: 1	DIF:	advanced	REF:	section 3.1	STANDARD: 5.1.8.A.1
14.	ANS: D	PTS: 1	DIF:	intermediate	REF:	section 3.2	STANDARD: 5.3.4.A.2
15.	ANS: A	PTS: 1	DIF:	intermediate	REF:	section 3.2	STANDARD: 5.3.4.A.2
16.	ANS: B	PTS: 1	DIF:	basic	REF:	section 4.1	STANDARD: 5.3.8.A.1
17.	ANS: C	PTS: 1	DIF:	intermediate	REF:	section 4.1	STANDARD: 5.1.8.A.1
18.	ANS: A	PTS: 1	DIF:	intermediate	REF:	section 4.1	STANDARD: 5.2.6.B.1
19.	ANS: C	PTS: 1	DIF:	basic	REF:	section 4.2	STANDARD: 5.1.8.A.1
20.	ANS: D	PTS: 1	DIF:	basic	REF:	section 4.2	STANDARD: 5.3.8.B.1
21.	ANS: C	PTS: 1	DIF:	basic	REF:	section 4.2	STANDARD: 5.3.8.B.1
22.	ANS: A	PTS: 1	DIF:	basic	REF:	section 4.2	STANDARD: 5.3.8.B.1
23.	ANS: C	PTS: 1	DIF:	intermediate	REF:	section 4.2	STANDARD: 5.3.8.B.1
24.	ANS: D	PTS: 1	DIF:	intermediate	REF:	section 4.2	STANDARD:5.3.12.A.2

COMPLETION

25. ANS: nucleic acid

    PTS: 1 DIF: basic REF: section 4.2 STANDARD: 5.3.12.D.1

SHORT ANSWER

26. ANS:
    1. Make observations or research something.
    2. Ask a question or state a problem.
    3. State a hypothesis.
    4. Test the hypothesis with an experiment.
    5. Draw conclusions based on the test.

    PTS: 1 DIF: basic REF: section 1.2 STANDARD: 5.1.8.A.3

Name:_____ Block: _____ Date: _____

27. ANS:
22ºC, because the most plants sprouted at that temperature.

PTS: 1 DIF: intermediate REF: section 1.3 STANDARD: 5.1.8.B.1

28. ANS:
temperature

PTS: 1 DIF: intermediate REF: section 1.3 STANDARD: 5.1.8.B.1

29. ANS:
Number of plant sprouts

PTS: 1 DIF: intermediate REF: section 1.3 STANDARD: 5.1.8.B.1

30. ANS:
Same type of plants, same amount of water, same soil, same amount of light, same location, etc.

PTS: 1 DIF: intermediate REF: section 1.3 STANDARD: 5.1.8.B.4

31. ANS:
Example answers are given for each kingdom.

Kingdom Plantae - grass, tree, algae
Kingdom Animalia - bird, fish, reptile, insect, mammal
Kingdom Protista - slime molds, euglenoids, amoeba, paramecium
Kingdom Fungi - yeast, mushrooms, bread mold,
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Kingdom Archaebacteria - primitive bacteria found in hot springs or deep sea vents Thermophiles, Halophiles, etc

PTS: 1 DIF: intermediate REF: section 3.1 STANDARD: 5.1.8.A.1

32. ANS:
Answers may vary. Correct answers will include of the following:
All living things:
1. Reproduce
2. Respond to stimuli
3. Use energy
4. Are made of cells
5. Grow and develop
6. Exchange Gases
7. Excrete Wastes

PTS: 1 DIF: basic REF: section 2.1 STANDARD: 5.3.4.A.1

PROBLEM

33. ANS:
84,375 cm^3

Volume = length × width × height

Volume = 75 cm × 25 cm × 45 cm = 84,375 cm^3

PTS: 1 DIF: intermediate REF: section 1.2 STANDARD: 5.2.4.A.3