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Challenge Questions from Section 1 Chapter 1: What is Life?

1. Using page seven in your text book, the circles at the top of the page are enlarged cells. Describe how the two samples are different. _____

Why are the two circles different? _____

2. Explain what you think magnified mushroom cells would look like. _____

Draw a sample of what you think mushroom cells look like.

3. List five stimuli and responses of plants and animals. _____

4. On page 9, how does the seedling resemble the sunflower plant? _____

How does the seedling differ from the sunflower plant? _____

5. Without using your notes, list the six characteristics of all living things.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

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Challenge Questions from Section 2 Chapter 1: Classifying Organisms

1. How might you classify a sunflower, robin, lizard, blue jay, and a tree?

2. These three species of cats belong to the same genus. Their scientific names share the same first word, *Felis*. The second word of their name describes a feature of the animal. Describe that feature:

Felis concolor: _____

Felis marmotata: _____

Felis domesticus: _____

3. Pill bug, wood louse, roly poly, and *Porcellio scaber* all mean the same thing. Design a graphic organizer, chart, picture, sentences, etc. that visually compares these four names.

Challenge Questions from Chapter 1

1. Without using your notes, list the six characteristics of all living things.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

2. Without using your notes, list the four basic needs of all living things.

- 1.
- 2.
- 3.
- 4.

3. Without using your notes, list the eight levels of classification of living things.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.

4. Without using your notes, list the three domains. (spell the best you can)

- 1.
- 2.
- 3.

5. Without using your notes, list the four kingdoms of all living things.

- 1.
- 2.
- 3.
- 4.

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Questions from Chapter 1 Section 1

1. List the six characteristics of living things.

2. A bird sitting in a tree flies away as you walk by. Which of the life characteristics explains the bird's behavior?

3. Explain why the tree, which does not move away, is also considered a living thing.

4. What four things do all organisms need to survive?

5. Which need is a fox meeting by feeding on berries?

6. The arctic fox has thick, dense fur in the winter and much shorter fur in the summer. How does this help the fox maintain homeostasis?

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Questions from Chapter 1 Section 2

1. Why do biologist classify?
2. Suppose someone tells you that a jaguarondi is classified in the same genus as house cats. What characteristics do you think a jaguarondi might have?
3. List in order the levels of classification, beginning with domain.
4. Woodchucks are classified in the same family as squirrels, but in a different family than mice. Do woodchucks have more characteristics in common with squirrels or mice? Explain.
5. What is a taxonomy key?

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Questions from Chapter 1 Section 3

1. What are the three domains into which organism are classified?
2. What information do you need to know to determine the domain to which an organism belongs?
3. What is a prokaryote?
4. Which two domains include only organisms that are prokaryotes?
5. How do the members of the two domains of prokaryotes differ?
6. What do the cells of protists, fungi, plants, and animals have in common?
7. How are protista and plants similar? Different?
8. You learn that the Venus flytrap is in the same kingdom as pine trees. What characteristics do these organisms share?