

Name: _____

Period: ____ Date: _____

The Pamishan: Classification and Dichotomous Key Activity

Objective: To identify and classify newly discovered creatures from the planet Pamishan using a dichotomous key.

Background: “Dichotomous” means “divided into two parts.” Dichotomous keys give two choices in each step. In each step, you are presented with two statements based on characteristics of the organism. If you make the correct choice every time, the name of the organism will be revealed at the end.

Materials: dichotomous key, sheet of Pamishan creatures.



Procedure:

1. Use the dichotomous key on the back of this sheet to identify all 20 of the Pamishan creatures.
2. Some things to keep in mind when using a dichotomous key:
 - Always read and consider both choices, even if the first one seems to be appropriate.
 - Always understand the meaning of the words used in each choice. Define the term. If you are not sure of the meaning, look it up in a dictionary. Never guess, as this could lead to the wrong classification of the item.
 - When there are measurements given in the choices, use the appropriate measuring tools or adjust them to match your own set of tools.
 - If you are left with two possible answers, read the description of both and decide which one seems to fit your specimen more exactly.

For each new creature you are identifying, don't forget to start over at the first step in the key!

3. Record your identification of each of the organisms in the provided table.

Discussion Questions:

1. What is the standard classification system for organisms? Who came up with this system?
2. What is the largest (broadest) level of classification? The smallest?
3. How do we classify organisms? (What do we think about when grouping organisms?)
4. What is a major factor that differentiates one species from another?

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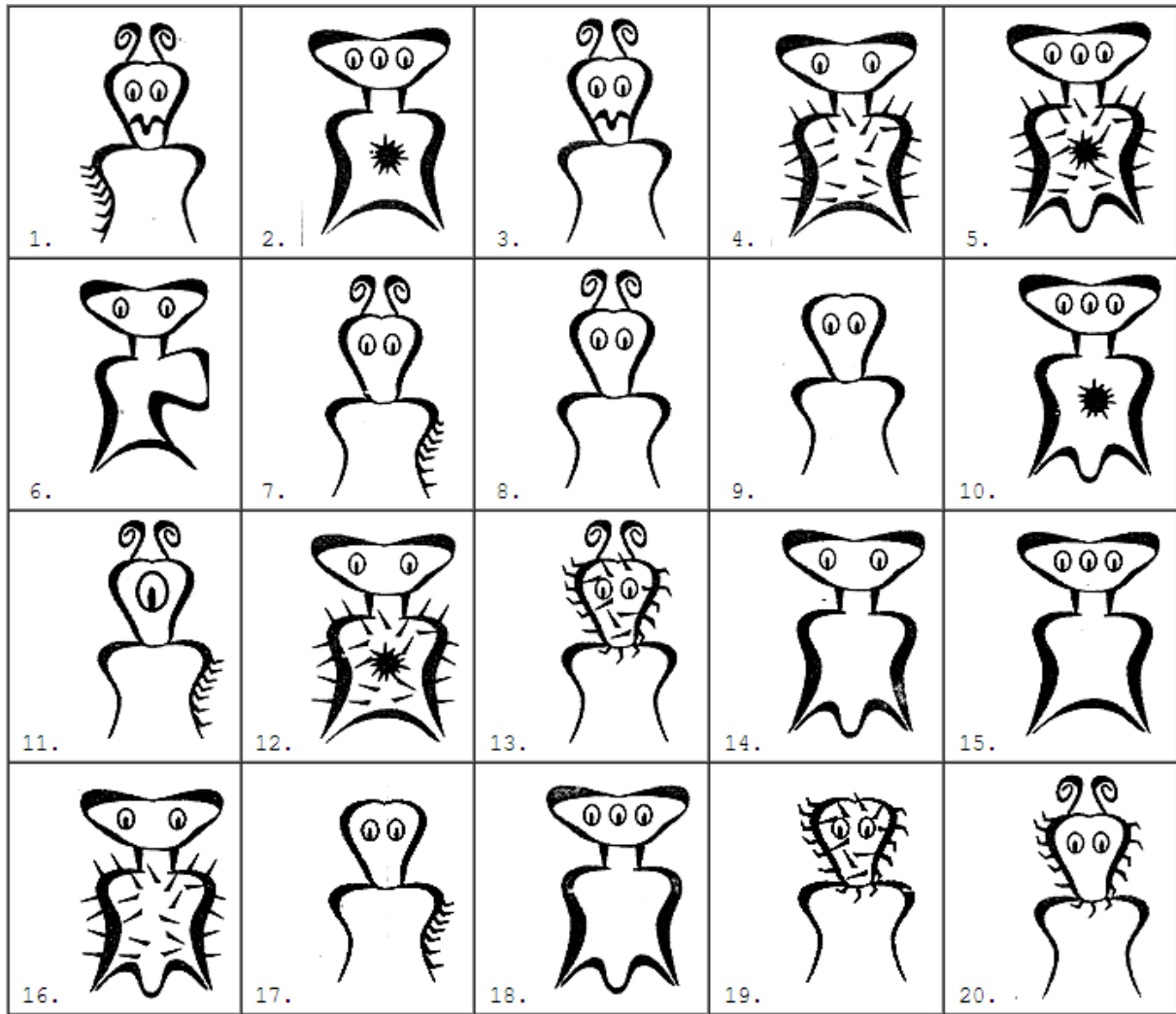
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A Key to New Pamishan

1. a. The creature has a large wide head.....go to 2
b. The creature has a small narrow head.....go to 11
2. a. It has 3 eyesgo to 3
b. It has 2 eyesgo to 7
3. a. There is a star in the middle of its chest.....go to 4
b. There is no star in the middle of its chestgo to 6
4. a. The creature has hair spikes*Broadus hairus*
b. The creature has no hair spikes.....go to 5
5. a. The bottom of the creature is arch-shaped*Broadus archus*
b. The bottom of the creature is M-shaped*Broadus emmus*
6. a. The creature has an arch-shaped bottom*Broadus plainus*
b. The creature has an M-shaped bottom.....*Broadus tritops*
7. a. The creature has hairy spikesgo to 8
b. The creature has no spikes.....go to 10
8. a. There is a star in the middle of its body*Broadus hairystarus*
b. There is no star in the middle of its bodygo to 9
9. a. The creature has an arch shaped bottom*Broadus hairyemmus*
b. The creature has an M shaped bottom*Broadus kiferus*
10. a. The body is symmetrical*Broadus walter*
b. The body is not symmetrical.....*Broadus anderson*
11. a. The creature has no antennaego to 12
b. The creature has antennaego to 14
12. a. There are spikes on the face*Narrowus wolfus*
b. There are no spikes on the facego to 13
13. a. The creature has no spike anywhere*Narrowus blankus*
b. There are spikes on the right leg*Narrowus starboardus*
14. a. The creature has 2 eyes.....go to 15
b. The creature has 1 eye.....*Narrowus cyclops*
15. a. The creature has a mouth.....go to 16
b. The creature has no mouth.....go to 17
16. a. There are spikes on the left leg*Narrowus portus*
b. There are no spikes at all*Narrowus plainus*
17. a. The creature has spikesgo to 18
b. The creature has no spikes*Narrowus georgia*
18. a. There are spikes on the headgo to 19
b. There are spikes on the right leg.....*Narrowus montanian*
19. a. There are spikes covering the face*Narrowus beardus*
b. There are spikes only on the outside edge of head*Narrowus fuzzus*

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1.	2.
3.	4.
5.	6.
7.	8.
9.	10.
11.	12.
13.	14.
15.	16.
17.	18.
19.	20.