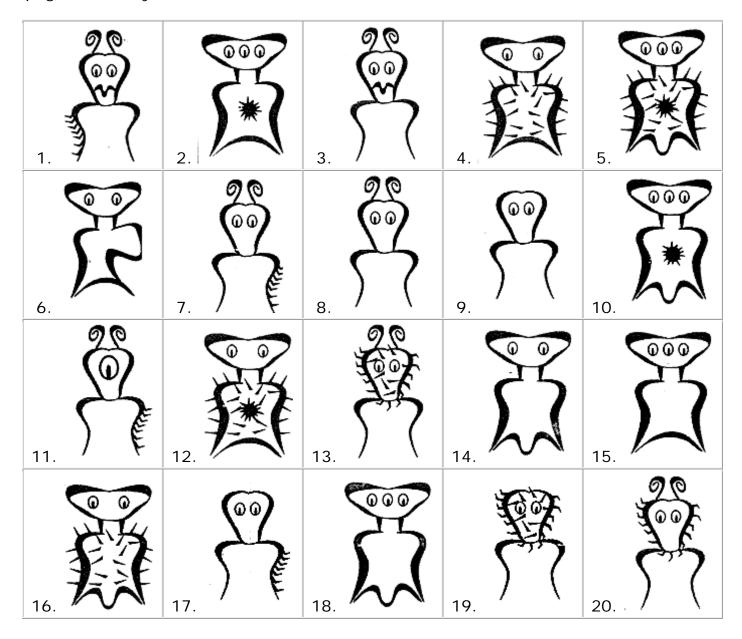
## Taxonomy, Classification, and Dichotomous Keys

Help! Scientists have discovered quite a few new creatures on planet Pamishan. They need your help to identify and classify them. Use the dichotomous key on the next page to identify these creatures.



## A Key to New Pamishan Creatures

| 1.                   | a. The creature has a large wide head                                                                                                                                                                                                                                                                                                                                                                                                                                             | <del>-</del>                                                                                                                                                    |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                      | b. The creature has a small narrow head                                                                                                                                                                                                                                                                                                                                                                                                                                           | go to 11                                                                                                                                                        |
| 2.                   | a. It has 3 eyes                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | go to 3                                                                                                                                                         |
|                      | b. It has 2 eyes                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                 |
| 3.                   | a. There is a star in the middle of its chest                                                                                                                                                                                                                                                                                                                                                                                                                                     | _                                                                                                                                                               |
|                      | b. There is no star in the middle of its chest                                                                                                                                                                                                                                                                                                                                                                                                                                    | go to 6                                                                                                                                                         |
| 4.                   | a. The creature has hair spikes                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                 |
|                      | 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                                                                                                                                                                                                                                                                                                                                                                                                                                         | •                                                                                                                                                               |
|                      | b. The creature has an M-shaped bottom                                                                                                                                                                                                                                                                                                                                                                                                                                            | Broadus tritops                                                                                                                                                 |
| 7.                   | a. The creature has hairy spikes                                                                                                                                                                                                                                                                                                                                                                                                                                                  | _                                                                                                                                                               |
|                      | b. The creature has no spikes                                                                                                                                                                                                                                                                                                                                                                                                                                                     | go to 10                                                                                                                                                        |
| 8.                   | a. There is a star in the middle of its body                                                                                                                                                                                                                                                                                                                                                                                                                                      | Broadus hairystarus                                                                                                                                             |
|                      | b. The is no star in the middle of its body                                                                                                                                                                                                                                                                                                                                                                                                                                       | go to 9                                                                                                                                                         |
| 9.                   | •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | -                                                                                                                                                               |
|                      | b. The creature has an M shaped bottum                                                                                                                                                                                                                                                                                                                                                                                                                                            | Broadus kiferus                                                                                                                                                 |
| 10                   | a. The body is symmetrical                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Broadus walter                                                                                                                                                  |
|                      | b. The body is not symmetrical                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Broadus anderson                                                                                                                                                |
| 11                   | . a. The creatrue has no antennae                                                                                                                                                                                                                                                                                                                                                                                                                                                 | go to 12                                                                                                                                                        |
|                      | b. The creature has antennae                                                                                                                                                                                                                                                                                                                                                                                                                                                      | go to 14                                                                                                                                                        |
| 12                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | _                                                                                                                                                               |
|                      | a. There are spikes on the face                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Narrowus wolfus                                                                                                                                                 |
|                      | b. There are no spikes on the face                                                                                                                                                                                                                                                                                                                                                                                                                                                | go to 13                                                                                                                                                        |
| 13                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | go to 13                                                                                                                                                        |
| 13                   | b. There are no spikes on the face                                                                                                                                                                                                                                                                                                                                                                                                                                                | go to 13<br><i>Narrowus blanku</i> s                                                                                                                            |
|                      | b. There are no spikes on the face                                                                                                                                                                                                                                                                                                                                                                                                                                                | go to 13Narrowus blankusNarrowus starboardusgo to 15                                                                                                            |
| 14                   | b. There are no spikes on the face                                                                                                                                                                                                                                                                                                                                                                                                                                                | go to 13Narrowus blankusNarrowus starboardusgo to 15Narrowus cyclops                                                                                            |
| 14                   | b. There are no spikes on the face                                                                                                                                                                                                                                                                                                                                                                                                                                                | go to 13Narrowus blankusNarrowus starboardusgo to 15Narrowus cyclopsgo to 16                                                                                    |
| 14<br>15             | b. There are no spikes on the face                                                                                                                                                                                                                                                                                                                                                                                                                                                | go to 13Narrowus blankusgo to 15go to 15Narrowus cyclopsgo to 16go to 17                                                                                        |
| 14<br>15             | b. There are no spikes on the face                                                                                                                                                                                                                                                                                                                                                                                                                                                | go to 13Narrowus blankusgo to 15go to 15Narrowus cyclopsgo to 16go to 17                                                                                        |
| 14<br>15             | b. There are no spikes on the face                                                                                                                                                                                                                                                                                                                                                                                                                                                | go to 13go to 13Narrowus blankusgo to 15Narrowus cyclopsgo to 16go to 17Narrowus portus                                                                         |
| 14<br>15<br>16       | b. There are no spikes on the face a. The creature has no spike anywhere b. There are spikes on the right leg a. The creature has 2 eyes b. The creature has 1 eye. b. The creature has a mouth. b. The creature has no mouth. c. a. There are spikes on the left leg b. There are no spikes at all c. a. The creature has spikes                                                                                                                                                 | go to 13Narrowus blankusgo to 15Narrowus cyclopsgo to 16go to 17Narrowus portusNarrowus plainus                                                                 |
| 14<br>15<br>16       | b. There are no spikes on the face a. The creature has no spike anywhere b. There are spikes on the right leg a. The creature has 2 eyes b. The creature has 1 eye. b. The creature has a mouth. b. The creature has no mouth. c. a. There are spikes on the left leg b. There are no spikes at all                                                                                                                                                                               | go to 13Narrowus blankusgo to 15Narrowus cyclopsgo to 16go to 17Narrowus portusNarrowus plainus                                                                 |
| 14<br>15<br>16<br>17 | b. There are no spikes on the face a. The creature has no spike anywhere b. There are spikes on the right leg a. The creature has 2 eyes b. The creature has 1 eye. b. The creature has a mouth. b. The creature has no mouth. c. a. There are spikes on the left leg b. There are no spikes at all c. a. The creature has spikes                                                                                                                                                 | go to 13Narrowus blankusgo to 15Narrowus cyclopsgo to 16go to 17Narrowus portusNarrowus plainusNarrowus georginia                                               |
| 14<br>15<br>16<br>17 | b. There are no spikes on the face a. The creature has no spike anywhere b. There are spikes on the right leg a. The creature has 2 eyes b. The creature has 1 eye. a. The creature has a mouth. b. The creature has no mouth. c. a. There are spikes on the left leg b. There are no spikes at all c. a. The creature has no spikes b. The creature has no spikes c. a. There are spikes on the head c. a. There are spikes on the head c. b. There are spikes on the right leg. | go to 13Narrowus blankusNarrowus starboardusgo to 15Narrowus cyclopsgo to 16go to 17Narrowus portusNarrowus plainusNarrowus georginiago to 19Narrowus montanian |
| 14<br>15<br>16<br>17 | b. There are no spikes on the face a. The creature has no spike anywhere b. There are spikes on the right leg a. The creature has 2 eyes b. The creature has 1 eye. a. The creature has a mouth. b. The creature has no mouth. c. a. There are spikes on the left leg b. There are no spikes at all c. a. The creature has no spikes b. The creature has no spikes c. a. There are spikes on the head                                                                             | go to 13Narrowus blankusNarrowus starboardusgo to 15Narrowus cyclopsgo to 16go to 17Narrowus portusNarrowus plainusNarrowus georginiago to 19Narrowus montanian |