

Life on Other Planets

Complete the following table as you work through your key. You also must come up with an animal on Earth that shares the trait your new creature also has.

Characteristic of your animal	Similar trait found on an organism on Earth
1. Skin –	
2. Skin Covering –	
3. Openings –	
4. Body Shape –	
5. Segments –	
6/7. Appendages –	
8. Hard Parts –	
9. Size –	
10. Food –	
11. Predator –	
12. Defensive Behavior –	
13. Eyes –	
14. Reproduction –	
15. Asexually –	
16. Sexually –	
17. Type of Birth –	
18. Location –	

On each roll you will use one dice. Record all of your adaptations on the previous page; remember to follow the order of the key.

1. **Skin - If you roll a...**
 - 1 or 2 = Scaly skin
 - 3 or 4 = Mucus covered skin
 - 5 or 6 = Leathery skin

2. **Skin Covering – If you roll a...**
 - 1, 2, or 3 = Fur
 - 4, 5, or 6 = Feathers

3. **Openings (organisms have different openings or holes in their bodies to breathe, get rid of waste, and eat. How many holes does your organism have, and what job does the opening perform) – If you roll a...**
 - 1 or 2 = 1 opening
 - 3 or 4 = 2 openings
 - 5 or 6 = 3 openings

4. **Body shape - If you roll a...**
 - 1 or 2 = longer
 - 3 or 4 = wider
 - 5 or 6 = different shape

5. **Segments – If you roll an even number proceed to number 6. If you roll an odd number proceed to number 7.**

6. **Appendages for segments – Roll one dice two times and add the numbers together to find the number of segments your creature has. When you are finished go to number 8.**

7. **Appendages but no segments. You will have a typical number of two arms and two legs. When you are finished go to number 8.**

8. **Hard parts – If you roll a...**
 - 1, 2 or 3 = you have bones
 - 4, 5 or 6 = exoskeleton

9. **Size – If you roll a...**
 - 1 = minute (insect size)
 - 2 = small (1-10 lbs)
 - 3 = medium (20-50 lbs)
 - 4 = large (70-100 lbs)
 - 5 = extra large (110-200 lbs)
 - 6 = HUGE (500+ lbs)

10. **Food – If you roll a...**
 - 1 or 2 = Omnivore (Go to number 11)

3 or 4 = Carnivore (Go to number 11)
5 or 6 = Herbivore (If you rolled this, go to number 12)

11. Predator (How you catch your prey) – If you roll a ...
 - 1 = chase it
 - 2 = hit it
 - 3 = blind it
 - 4 = electric shock
 - 5 = strangle it
 - 6 = work together in a pack of the same species

12. Defensive Behavior (how you protect yourself) – If you roll a...
 - 1 = Run away
 - 2 = Hide
 - 3 = Freeze
 - 4 = Fight
 - 5 = Pretend you are bigger than you really are
 - 6 = Work together in a pack

13. Number of eyes – The number you roll = the number of eyes you have

14. Reproduction – If you roll an even number proceed to number 15. If you roll an odd number proceed to number 16.

15. You reproduce asexually. Roll the dice to see how many children you have at a time. The number you roll is the number you produce. (Go to number 17)

16. You reproduce sexually. Roll the dice to see how many children you have at a time. The number you roll is the number you produce. (Go to number 17)

17. Types of birth – If you roll a...
 - 1 or 2 = Lay hard eggs
 - 3 or 4 = Lay soft eggs
 - 5 or 6 = Live birth

18. Location of creature – If you roll a...
 - 1 or 2 = Mars
 - 3 or 4 = Jupiter
 - 5 or 6 = Venus

Now that you have finished developing your new creature, begin to draft on a piece of paper what your creature will look like. Give your creature a name, and brainstorm the habitat it will be living on. You will have one day to construct your critter, so make detailed plans! On days 3 and 4 you will be giving an oral presentation on your creature.

Creating Life Forms on Other Planets

Teacher Name: **Mrs. Dalzell-Wagers**

Student Name: _____

CATEGORY	4	3	2	1
Oral Presentation Time Limit	Time limit was followed with the 2-3 minute limit.	Time limit was over or short 1 minute	Time limit was over or short 2 minutes.	Presentation poorly planned. No oral report given.
Explanation of Creature	Student provides clear, appropriate description of animal. The modifications and adaptations are relative to the need for the planet.	Students provides an explanation of the creature but is not detailed.	Student is unsure of why adaptations were needed for planet.	Student does not provide an explanation for creature.
Comparison to Organism from Earth	Student refers at least 6 characteristics to animal on Earth to make information relevant for students.	Student refers at least 4 characteristics to animal on Earth to make information relevant for students.	Student refers at least 2 characteristics to animal on Earth to make information relevant for students.	Student does not refer to any characteristics to animal on Earth to make information relevant for students.
Preparedness	Student is completely prepared and has obviously rehearsed.	Student seems pretty prepared but might have needed a couple more rehearsals.	The student is somewhat prepared, but it is clear that rehearsal was lacking.	Student does not seem at all prepared to present.
Construction - Care Taken	Great care taken in construction process so that the structure is neat, attractive and follows plans accurately.	Construction was careful and accurate for the most part, but 1-2 details could have been refined for a more attractive product.	Construction accurately followed the plans, but 3-4 details could have been refined for a more attractive product.	Construction appears careless or haphazard. Many details need refinement for a strong or attractive product.