Investigating Reproductive Strategies

What are the advantages and disadvantages of sexual and asexual reproduction? Is one "better" than the other? You are a biologist who wants to find out. To answer these questions you will compare aspects of organisms that reproduce sexually with organisms that reproduce asexually. You will begin your study by looking at some organisms that represent both groups. Once your comparisons have been made, you will discuss your findings with all your group members to draw general conclusions about each method of reproduction.

As you read about each organism, place it in the right category below.

Sexual	Asexual	Both

Fill in the chart with as much detail as you can while you read the animal descriptions.

Characteristic	Sexual	Asexual
Relative complexity and size of organisms	Exceptions:	Exceptions:
Number of parents who contribute genetic information to the offspring and how the offspring compares to the parent(s)		

Characteristic	Sexual Reproduction Strategies	Asexual Reproduction Strategies
Amount of parental care		
Examples of parental care		
Genetic variation in the offspring <u>and how</u> <u>this is an advantage</u>		

Reflection—Discuss what you have learned about different reproductive strategies so far from this lesson.

Comparing Types of Reproduction

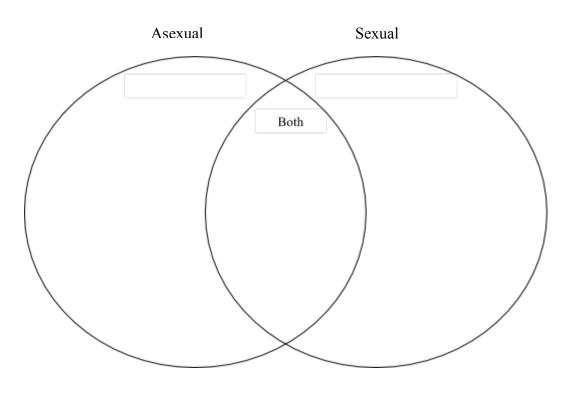
Place the numbers below in the appropriate space.

- 1. Requires only one organism
- 4. Offspring are identical to parent
- 7. More variation in offspring
- 10. Produces offspring
- 13.Usually involves less complex organisms
- Requires 2 organisms
 Involves little or no parental care

8. All mammals reproduce this way

- 3. Passes on genetic material
- 6. Involves fertilization of eggs
- 9. A bacterium splitting into 2

11. Flowers using pollen to create a seed 12. Used by complex animals



- 1. Name three organisms that can reproduce sexually.
- 2. Name two organisms that can reproduce asexually.
- 3. What is one organism that can reproduce both ways? Explain how it can reproduce both ways.