Grade 5 **Standard 5** **Unit Test**

Inherited Traits

Multiple Choice

1. In what way will a kitten always be like its parents? The kitten will …

   A. Be the same color
   B. Learn the same things
   C. Have the same body structures
   D. Live in the same places.

Puppy	Fur color	Height
Sam	Dark Brown	35 cm
Kira	Dark Brown	40 cm
Mongo	Black	30 cm
Chewy	Tan	33 cm
Yoso	White	45 cm

2. On the chart above, which puppies would you most expect to have parents with brown fur?

   A. Sam and Kira
   B. Mongo and Kira
   C. Chewy and Yoso
   D. Sam and Chewy

3. Which trait could be influenced by the environment?

   A. Fur color changes with the seasons.
   B. Fur color changes as you get older
   C. Height is affected by what you eat.
   D. You can stretch to grow taller.

4. An egg laid by a butterfly turns into a caterpillar. How can an offspring look so different from its parent?

   A. All offspring look much different from their parents.
   B. The caterpillar will become a butterfly.
   C. When the caterpillar lays eggs, they will hatch into butterflies.
   D. Butterflies are different from one another and from their parents.

5. How does a seller of Cocker Spaniels make sure every puppy they raise looks like a Cocker Spaniel?

   A. They cross a female Cocker Spaniel with a Golden Retriever.
   B. They dock their tails and ears as soon as they are born.
   C. They train the puppies to act like all Cocker Spaniels do.
   D. They make sure the mother and father are Cocker Spaniels.

6. What specialized structures do deer have that help them survive against predators?

   A. Warm, brown hair
   B. Large and intelligent brains
   C. Fast running bodies
   D. Good digestive systems

7. If you got a kitten, fed it cat food, let it live indoors and never taught it to hunt, it would still know how to catch a mouse. Why?

   A. Instinctive behavior is inherited from parents.
   B. It learned from its mother or father.
   C. Other adult cats in the neighborhood taught it.
   D. It learned from humans or other pets.

8. Dogs from Iceland have thick hair. What advantage does that give the dogs?

   A. They look bigger and impress their enemies.
   B. They stay warmer in the cold climate.
   C. They hunt better and can catch more food.
   D. More people will want them and they become popular.

9. Which of the following is NOT a way desert animals have adapted to survive in the desert?

   A. Thick fur.
   B. Are active at night
   C. Small size
   D. Live in burrows

10. To which environment is a buffalo best adapted?

    A. ice sheets
    B. mountains
    C. desert
    D. grasslands

Constructed Response

1. List five traits that a dog inherits from its parents.

2. List three learned behaviors that a dog does not inherit from its parents.

3. Describe three ways a bear is adapted to a forest environment in which it lives.

4. What advantage do the flippers of a penguin provide?

   What disadvantage?

Answers – Standard 5 Unit Test:

Multiple Choice:

1. C
2. A
3. A
4. B
5. D
6. C
7. A
8. B
9. A
10. D

Constructed Response

1. Inherited traits include body structures, some behaviors, and some illnesses: eye, hair, skin color, number of legs, arms, eyes, noses, ears, eyesight, facial structure, athletic ability.

2. Acquired traits include specific learned knowledge like how to beg, speak, roll over and skills such as finding hidden items.

3. Bears have sharp claws to help get food; they have thick fur to keep them warm; they hibernate in winter when it is cold; they store fat well in their bodies. To get away from danger or to catch their prey, they can run fast and climb trees well.

4. Flippers help a penguin swim extremely well, but penguins are clumsy and awkward on land.

Grade 5 **Standard 5** **Performance Test 1**

Raising Seeds

Activity Description
Students will grow seeds from a parent plant and investigate variations among the offspring.

Materials
Seeds, (if you can get a parent plant with seeds, like a sunflower, that would be best. If not, get a packet from the store and suggest to students that they could be from the same parent. Radishes and beans germinate quickly.) potting containers, water, light source or window, student sheet (see next page)

Time Needed
30 minutes initially, a few minutes of observation time over 3-4 weeks, 30 minutes to finish.

Procedure
1. Explain to students that they will be planting seeds from the same "family."
2. Ask students to predict how the seeds will be alike and different.
3. Show students how to plant the seeds and where to put them. Students may work in groups or individually but they need to be able to see 5-6 plants eventually.
4. Allow time for students to observe plants over the next few days and weeks.
5. Summarize the experiment when plants are large enough to see well. Students can measure plant height with rulers, count leaves, measure leaf width or observe color and shapes.
6. Have students answer questions on student sheet.

Scoring Guide:
1. Students make predictions …….. 1 pt.
2. Students plant seeds and take care of them ……. 10 pts.
3. Students make observations ……10 pts.
4. Students summarize plant characteristics …… 10 pts.
5. Students answer questions correctly ……. 5 pts.

Answers:

1. The plants will be similar in color, shape, and size.
2. The plants will be slightly different in color, shape, size and speed of development.
3. Likenesses are inherited from their parents.
4. Differences are also inherited, but may be due to the environment of each plant.
5. The plants are a lot more alike than different.
6. Most organism's traits are inherited.

Student Sheet **Name _____**

Raising Seeds

Introduction: In this activity you will plant seeds that are all related to one another. You will predict how they will be alike and different. After planting them, you will watch them for a few weeks and make observations. At the end of the experiment you will see if you predicted correctly.

Predictions:

1. How will the seeds be alike?

2. How will the seeds be different?

Data Chart	
Date	**Observations**

Summary

1. How were the plants alike?

2. How were they different?

3. Why were they alike?

4. Why were they different?

5. Do you think your plants had more things alike or different?

6. Why?

Grade 5 **Standard 5** **Performance Test 2**

My Favorite Wild Animal

Activity Description

Students will choose an animal and report how it is specifically adapted for survival in its environment. They will present their findings to the class on a poster, in an oral report with a visual aid, or with a PowerPoint presentation.

Materials

Reference sources such as encyclopedias, nature books (Eyewitness), the Internet, or texts.

Time Needed

Will vary depending on form of presentation.

Procedure

1. Explain the assignment to the students. Describe how you wish them to present their findings. If they are doing a PowerPoint, they may need instruction first.
2. Students should pick an animal and if you want to avoid having all of them pick the same one, have them write the animal name on the board and instruct them to no two students can have the same one.
3. Students should answer the following questions from their research:
    a. What is your animal?
    b. In what type of environment does it usually live?
    c. What are three physical adaptations the animal has?
    d. How does each adaptation help the animal?
    e. What are two behavioral adaptations?
    f. How do the behaviors help the animal?
    g. If the environment became warmer/colder how would it affect your animal?
4. If students are doing a poster or picture, they should show the animal and its environment to illustrate their report.
5. Allow students time to research their animal, prepare the poster, visual aid, or PowerPoint display and then present their findings. Reports should be under 5 minutes in length.

Scoring Guide:

1. Student writes report and answers all questions in research …….. 30 pts.
2. Student makes visual aid on poster or PowerPoint …… 20 pts.
3. Student gives oral report and uses visual aid to help explain ……10 pts.