Newspaper Natural Selection C. Kohn, Waterford WI

Name: Hour Date:

Date Assignment is due: *end of the hour* Why late? Score: + ✓ -
 Day of Week Date If your project was late, describe why

**Materials**: one large sheet of newspaper; 12 squares of paper (3 black, 3 red, 3 white, 3 newspaper); groups of 3-4

## Directions: Round 1 – Natural Selection

1. Lay out the sheet of newspaper so that it lies flat on your desk.
2. Choose the oldest person in your group to be the first “predator” and have them turn their back to the desk.
3. The remaining group members should arrange the squares of paper evenly on the sheet of paper.
	1. DO NOT overlap or conceal any of the pieces of paper.
	2. One group member must volunteer to be the counter and the other the starter (they say “GO”)
4. When one person in the group says “GO”, the ‘predator’ student turns around and grabs as many pieces of paper as he/she can with ONE hand while another group member counts to FIVE (e.g one-one-thousand, two-one-thousand…). Paper should be grabbed one piece at a time with only the thumb and forefinger.
5. Enter the data for what remained on the sheet after you finished.
6. Return the paper to the pile so that none overlap.
7. Repeat 3 more times, with a different person as the predator each time.

**Color # Remaining Rd 1 # Remaining Rd Rd 2 # Remaining Rd Rd 3 # Remaining Rd Rd 4 Total**

Black

Red

White

Newspaper

1. What impact did the “environment” have on what squares you selected?

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2. Would a black, red, or white environment have changed the squares that you selected?

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3. If we did this for 10 rounds instead of 3 or 4, how do you think your results would be different? Would we have a lot more or a lot less of some of the colors? Explain:

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## Directions: Round 2 – Artificial Selection

1. Lay out the sheet of newspaper so that it lies flat on your desk.
2. Choose the oldest person in your group to be the first “farmer” and have them turn their back to the desk.
3. The remaining group members should arrange the squares of paper evenly on the sheet of paper.
	1. DO NOT overlap or conceal any of the pieces of paper.
	2. One group member must volunteer to be the counter and the other the starter (they say “GO”)
4. When one person in the group says “GO”, the ‘farmer’ has 30 second to select 5 pieces of paper (and no more).
	1. It can be any 5 pieces for any reason. However, you can only select 5.
5. Enter the data for what was **selected** (*NOT what remains – this is a different strategy this time*).
6. Return the paper to the pile so that none overlap.
7. Repeat until everyone has had a chance to be a farmer.

**Color Number Selected Rd 1 Number Selected Rd 2 Number Selected Rd 3 Number Selected Rd 4 Total**

Black

Red

White

Newspaper

1. What is the most common color in your herd? Why?

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2. Did other groups have different herds? Why did they choose different colors?

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3. How is this like how breeds of cattle, dogs, horses, and other animals developed over time?

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4. Imagine the only animals of the ‘paper species’ that exist are the ones you selected for during each round. How did the selection pressures differ and how were they the same between the natural selection round and the artificial selection round?

How they were the same: \_

How they differed: \_