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Your Name: _____

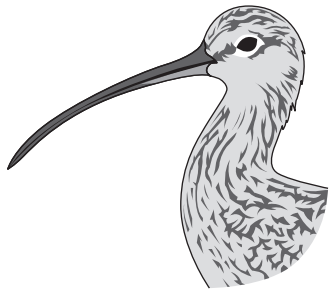
Partner's Name(s): _____



NEW ENGLAND COMMON ASSESSMENT PROGRAM

Task Booklet 2008

Grade 4



Released Science Inquiry Task

Bird Beaks and Survival

Science

Directions:

You will conduct a science investigation called **Bird Beaks and Survival**. First you will work with your partner(s) and then you will work alone.

You will make a prediction on your own. You will set up and conduct the investigation, and you will collect and record your data with your partner(s).

Scientists often make models to guide their investigations. You will be using materials that represent bird beaks and kinds of food that birds eat in nature.

Follow the directions in this Task Booklet. Please remember that in addition to working with the science materials, you must **record your data in the Data Table on page 7**.

In this task, you will

- make a prediction on page 5.
- share one set of materials with your partner(s).
- work together with your partner(s) to use the materials.
- record your data and observations in the Data Table on page 7.

Note: In the operational test, students were instructed to copy their data from the Data Table to their Student Answer Booklet.

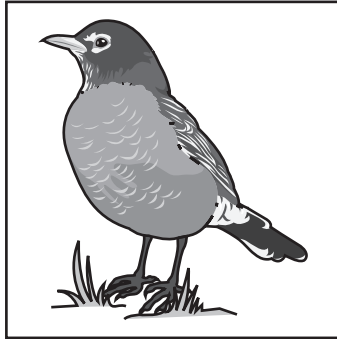
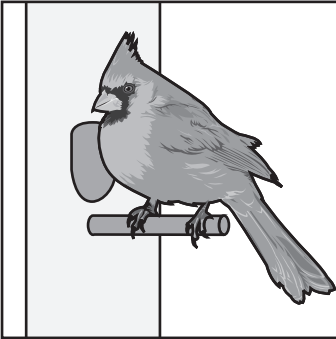
The words listed in the table below are used in this investigation.

Word Bank

Identify	to tell what something is
Investigation	when someone studies something
Observation	when someone watches or looks at something
Plan	a list of steps to follow to do an experiment
Prediction	what someone thinks will happen
Survival	meeting needs to stay alive

Bird Beaks and Survival

The students in Mr. Brown's fourth-grade class are observing different groups of birds outside their classroom. One group of birds is eating from a bird feeder. A second group of birds is eating off the ground, and a third group of birds is pecking at the bark of a tree.



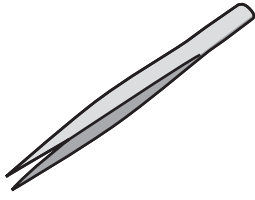
The students notice that the three groups of birds have different beaks. They ask Mr. Brown if the shape of a bird's beak has something to do with what the bird eats.

Mr. Brown tells his students that they will do an investigation to find out if the shape of a bird's beak is related to what the bird eats. He decides to have the students use different kinds of materials to represent different bird beaks.

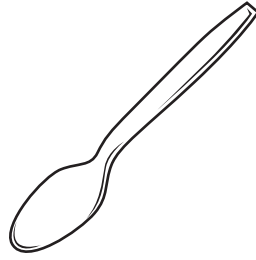
He asks the students to investigate the following question:

Which beak will pick up the most different kinds of food?

Mr. Brown gives the students the materials shown below to represent different types of **beaks**.



Tweezers

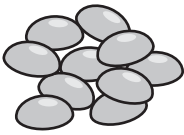


Spoon

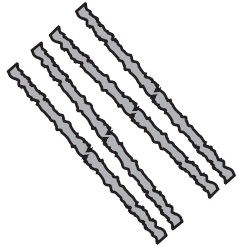


Toothpick

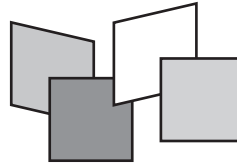
Mr. Brown gives the students the materials shown below to represent different kinds of **food**.



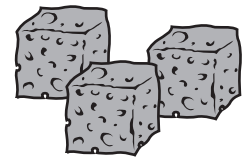
Glass pieces
(seeds)



Pipe cleaners
(worms)



Paper squares
(leaves)



Pieces of sponge
(insects)



Making a Prediction—What Do You Think?

Which beak will pick up the most different kinds of food?

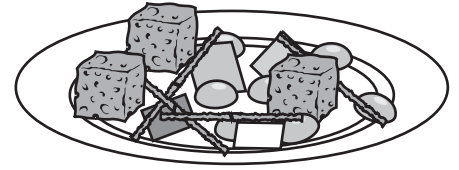
Make a prediction on your own about the question.

- Use the information from the story about Mr. Brown’s class and what you know about birds to make your prediction.
- Explain your prediction.

Write your prediction in the box below.

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Procedure:

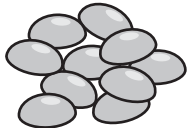
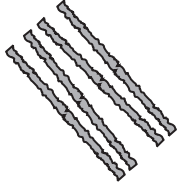
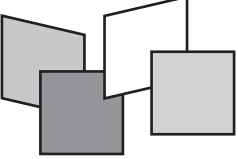
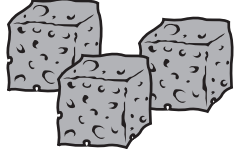
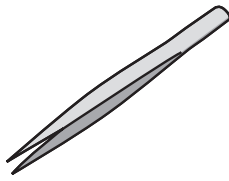
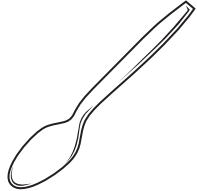
You and your partner(s) will take turns using the beak materials. You will each record all of the data in your own Task Booklet.

Follow this procedure for all three beak types. Use each beak only one time.

1. Carefully pour the food items from the cup onto the paper plate.
2. Choose a beak.
3. Use the beak to pick up as many food items on the plate as you can in one minute. Put the food items you pick up in the cup.
4. Your partner turns over the timer when you begin. Your partner also tells you when time is up.
5. Use only one hand, the hand with the beak, to pick up the food items. Use your other hand to hold the cup on your desk or table.
6. Do **not** use your fingers to pick up the food items. Use only the beak.
7. Stop when all of the sand drains to the bottom of the timer.
8. Put your beak back on the placemat.
9. Pour the food items you collected from your cup onto your desk or table.
10. Sort these food items by type.
11. Count the number of each type of food item you picked up. Write the number in the Data Table on page 7. Write a zero in the data table if you did not pick up any. You and your partner(s) should each record the data in your own Task Booklet.
12. Return all of the food items to the food plate and mix them up.
13. Choose another beak. Repeat the procedure using each beak only one time.

When your Data Table is complete, return all of the food items to the cup and replace the beaks on the placemat.

Data Table: Food Items Collected by Different Beak Types

	Glass pieces 	Pipe cleaners 	Paper squares 	Pieces of sponge 
Tweezers 				
Spoon 				
Toothpick 