

GRADE 2

Empire State

Mathematics



Sample
Lesson

Continental Press

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Estimating Numbers

Indicator 2.N.22

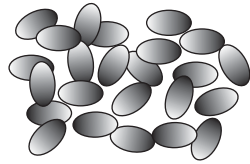
estimate

about

skip count



It is easy to count a small number of things. You can **estimate** a larger number. An estimate is a careful guess.



Are there **about** 5, 10, or 20 jelly beans?

1. Look at the picture. You can see there are more than 5 jelly beans.
2. You can count 10 jelly beans, but there are still many left.
3. You can estimate there are **about** 20 jelly beans.



Sometimes you will see the word **about** in a math problem. This lets you know you have to estimate.

A good way to estimate is to use **skip counting**.

About how many stars are there?



1. Draw a circle around 2 stars.
2. Picture groups of stars that are about the same size. There are about 10 groups.
3. Skip count the groups by 2's. Say, "2, 4, 6, 8, 10, 12, 14, 16, 18, 20." There are **about** 20 stars.



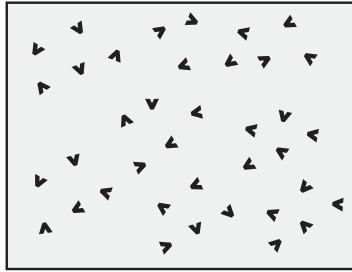
You can skip count by **any** number when you estimate.



GUIDED PRACTICE

Try this sample multiple-choice problem.

S These bugs are on a window screen.



About how many groups of 5 bugs do you see?

- A 8 C 3
 B 5 D 2



This problem asks you to estimate how many groups of 5 bugs you see. Circle a group of 5 bugs. How many groups of that size are in the picture? You could make about 8 groups. The correct answer is A.



INDEPENDENT PRACTICE

Read each problem. Circle the letter of the best answer.

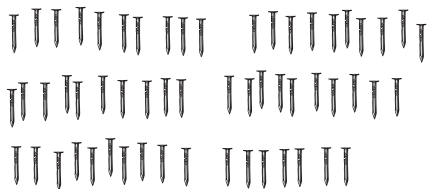
1 Look at these apples.



About how many apples are there?

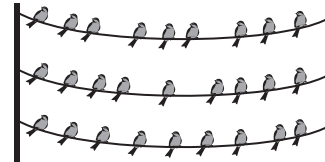
- A 10 C 60
 B 30 D 70

2 **About** how many nails are shown?



- A 60 C 40
 B 50 D 30




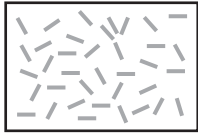
3 Look at the birds on the wires.



About how many birds are there?

- A 10 C 80
 B 30 D 100

4 Which picture shows **about** 20 sticks of chalk?

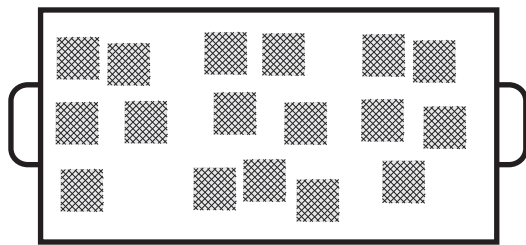
- A  C 
 B  D 



GUIDED PRACTICE

Try this sample constructed response problem.

5 These crackers are on a tray.



About how many crackers are there?

Answer: 20

Explain how you made your estimate.



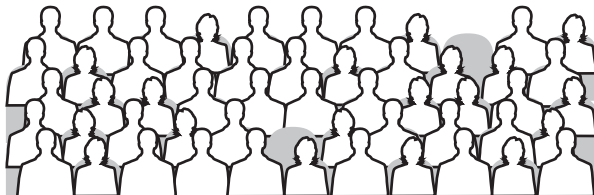
This problem asks you to estimate the number of crackers in a picture. Skip counting is a good way to estimate. Draw a circle around 5 crackers. How many groups of about 5 are in the picture? There are about 4 groups. Skip count 5, 10, 15, 20. There are about 20 crackers.



INDEPENDENT PRACTICE

Read the problem. Write your answers.

5 The picture shows a group of people at a hockey game.



Part A: How many groups of about 10 are in the picture?

Answer: _____

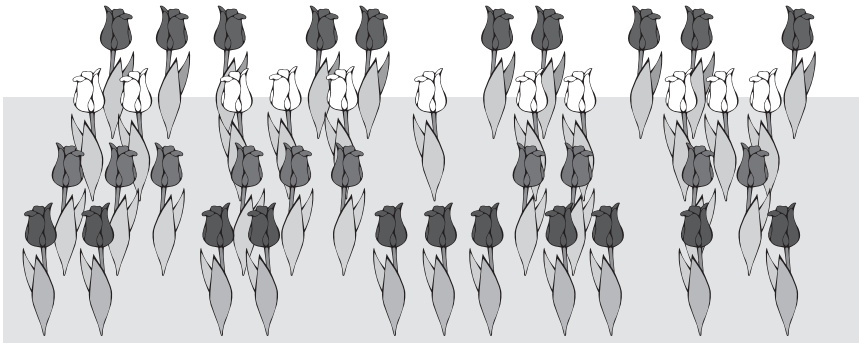
Part B: **About** how many people went to the hockey game?

Answer: _____



Read the problem. Write your answers.

6 These flowers are growing in a garden.



Part A: How many groups of equal size did you make?



Circle a group of 10 flowers.

Answer: _____

Part B: **About** how many flowers are growing in the garden?

Answer: _____

Explain how you found your answer.
