Visual Estimation
Early Elementary

Look at the picture. Estimate how many shapes you see. You won’t have time to count!

Talk with someone next to you about your estimate.
What strategy did you use?

Was it the same or different as your partners?

Real Life Estimation Situations
1. Think of a situation (or multiple) in real life where you need to use estimation.
Quantity: Guess and Check

2. Estimate how many stars are in the picture, then count and check.

Estimate:

Exact Number:

3. Approximately how many people can sit in the theater?

Estimate:

Exact Number:
4. Estimate how many books are in the book shelf.

Estimate:

Exact Number:

5. Draw a vertical line through the image (before counting) so that approximately half of the books are on one side and half on the other. Then count to check your answer.
6. There are three stacks of pizza boxes.

(a) Approximately how many pizza boxes are there? Count to check your answer.

Estimate:

Exact Number:

(b) Estimate how many children the pizza in the above picture would feed and explain your answer. (Hint: Use your life experience for this question. The important part is your explanation.)
Quantity: Guess with Imagination

7. Felix is baking sugar cookies. His pot holder is covering part of the baking sheet. Estimate how many total sugar cookies Felix put on the baking sheet. Explain your thinking.

8. Felix also baked chocolate chip cookies. He placed his oven mits on top of some of them. Approximately how many chocolate chip cookies did he place on the baking sheet? Explain your thinking.

Comparing the Number of Objects without Counting

10. Are there more small lego pieces or large lego pieces? What strategy did you use?
11. Are there more footballs or baseballs? What strategy did you use?

Quantity: Experimenting in the Classroom

12. Estimate (without counting) how many desks are in the classroom. Check with a TA.

Estimate:

Exact Number:
13. Estimate (without counting) how many people are in class today. Check with a TA.

Estimate:

Exact Number:

14. Ask a teacher for bags of cotton balls. Estimate how many are in the bag with the blue dot. Count to check your estimate, and write down if your guess was too big or too small. Do the same with the bag with the red dot.

<table>
<thead>
<tr>
<th>Bag</th>
<th>Estimate</th>
<th>Exact Number</th>
<th>Too Big/Too Small</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Length: Comparisons

15. Write the names of the objects in order from longest to shortest.
Length: Guess and Check

15. Estimate the length of the line. Use a ruler to check your answer.

\[
\text{Length found with ruler: 1 cm}
\]

Estimate:

Length found with ruler:

16. Estimate the length of the line. Use a ruler to check your answer.

\[
\text{Length found with ruler: 1 cm}
\]

Estimate:
**Height:**

17. Estimate how tall this Christmas tree is. (Hint: Santa is 5 ft tall)

Explain your estimate.

**Length: Experimenting in the Classroom**

18. Estimate how many paper clips long each item is. Check with a TA.

(a) Your pencil.

Estimate:

Length found with paper clips:

(b) The width of this piece of paper.

Estimate:

Length found with paper clips:
Area

19. If the small square has an area of 1, what is the area of the big square? Check with a TA.

\[
\text{= 1 Unit}
\]

20. If the small rectangle has an area of 2, what is the area of the big rectangle? Check with a TA.

\[
\text{= 1 Unit}
\]
Area: Experimenting in the Classroom

21. Approximately how many pieces of paper are required to completely cover the blackboard in the front of the classroom? Check with a TA.

Estimate:

Exact Number: