Lakiso and Sara are practising estimation. They record each estimate and how they reached it like this:

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Method</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>The number of people the school hall will seat</td>
<td>Estimate how many people will fit in 1 row, then picture the number of rows that will fit in the hall. Multiply these two numbers.</td>
<td>$20 \times 11 = 220$ people</td>
</tr>
</tbody>
</table>

1. Write down in your own words what *estimation* means. Suggest three reasons why it’s important to be able to estimate.

2. Here are some estimation challenges. Working with a classmate, choose three of them and make an estimate for each. Write down your methods.

- The height of a tall tree in your school grounds
- The time it would take you to walk 2 kilometres
- The number of students who could fit on half a netball court
- The total mass of all the chairs and desks in the classroom
- The amount you would drink in a week
- The distance from the office door to the classroom door
- The height of a 12-storey office block
- The number of posts (1 metre apart) needed for a fence around the sports ground
- The time you spend each year tidying your room/doing the dishes
- The number of words in a 300-page novel
- The time it would take to bounce a ball 2000 times
- The time you spend sleeping in 1 year

3. Discuss your results and methods with another pair of classmates. If you’ve done one of the same challenges, is your estimate similar to theirs?

4. Write two different estimation challenges for a classmate to try.