

## Estimating how many

Help children to develop their confidence with numbers with this estimation activity.

### Learning aims

- To estimate amounts as numbers
- To compare amounts
- To write numerals
- To use mathematical language such as more, less, equal.



### Resources

- Clear jar or container
- Collection of objects of relatively similar size, for example marbles, beads, conkers, pebbles, toy cars etc.
- Post-it notes
- Pens or pencils
- Number track or number line.

### Activity Outline

1. The aim of the activity is for children to estimate how many things are in the jar, then count to find out
2. Place a collection of objects in a jar (you can use any amount suitable for the children you are working with. Your number track or number line has to contain the same or more numbers so children can use this to support them)
3. Ask the children questions in order to help them come up with their estimation. Questions such as, “how many do you think there are altogether?” “Why do you think that?” “How many can you see?” “Do you think some are hidden?” can help children to come up with an estimate
4. Encourage children to record their guesses on post-it notes using the number track or number line to support them
5. Support children to then order their guesses along the number track or number line and discuss who has estimated the most, least, the same etc.
6. Empty out the collection from the jar and put these in a line. Tagging each item by pointing to it encourage children to count the items with you
7. Engage children in further conversation about their estimates – ask questions such as, “Did anyone guess the exact amount or number?” “Was your guess more or less than the actual amount?” Can children explain how/why?

## Extending the activity

- Use different sized or shaped objects, for example different keys to make estimating more challenging
- Set up an estimation station. You can include jars of collections which children can estimate or you can provide collections of resources and various empty containers for children to estimate. For example, how many pine cones can you fit in a yoghurt pot, bucket etc.?

## Special considerations

*The resources in this activity are examples only. Collections should be decided upon and risk assessed according to the age and stage of development of the children in your care.*