



## **Activity Idea**

Activity

**Tracing Estimation** 

Possibilities for			
maths learning	Counting	Composition	Cardinality
	□ Subitise	☑ Comparison	☑ Measure
	Shape	Pattern	Spatial awareness

Resources	Small counters or sticky dots (or any other small, round-shaped resource of the equal size small enough to fill children's hand traces)
	<ul> <li>Plain paper and pencils – for children to trace around their hands.</li> <li>Number line/ number grid.</li> </ul>

Activity Outline	In this activity, children will trace their own hands and estimate how many counters it will take to fill their hand trace.
	Explain to the children that today they are going to estimate how many counters it will take to fill their traced hands. Explain that firstly they will guess/estimate how many counters it will take to fill their hand, then they will actually place counters onto their tracing and count them to see how accurate their estimations are.
	So the children have a reasonable idea of what their estimates should be and how the activity works, model the activity first. Think out loud so that children will be able to incorporate the vocabulary and procedures into their own activity. For example, "First, I am going to trace around my hand on the paper, you can help and support each other to do this as it may be a little tricky. Now I am looking at my hand tracing (hold it up and gesture using a pondering/thinking face) and I am going to estimate that it will require 30 counters to fill my hand. Do you think that is a reasonable estimate?" Engage children in discussion. Continue by saying, "I am guessing 30 counters because that seems about right to me
	when I look at the size of my hand and the size of the counters". This helps children to see how you have estimated using shape, measures and spatial reasoning skills to help with your estimation.
	Refer to the number line/number grid (or ask children if they can show you where 30 is as an extra little challenge). Write the number 30 on the page above the hand trace. Then say: <i>"Let's see if I was accurate."</i> Begin placing counters into the tracing of your hand. When finished count the counters tagging them as you go and confirm the actual number it took to fill your hand tracing, <i>"it actually took 34 counters to fill my hand"</i> . Write the number 34 on the paper under the hand tracing. Then ask the children: <i>"Is 34 more or less</i>
	when I look at the size of my hand and the size of the counters". This helps children to see how you have estimated using shape, measures and spatial reasoning skills to help with your estimation. Refer to the number line/number grid (or ask children if they can show you where 30 is as an extra little challenge). Write the number 30 on the page above the hand trace. Then say: <i>"Let's see if I was accurate."</i> Begin placing counters into the tracing of your hand. When finished count the counters tagging them as you go and confirm the actual number it took to fill your hand tracing, <i>"it actually took 34 counters to fill my hand"</i> . Write the number 34 on the paper under the hand tracing. Then ask the children: <i>"Is 34 more or less than my original estimate of 30?"</i> . Engage children in discussion.

<ul> <li>Now it's the children's turn.</li> <li>Ask each child to get a sheet of paper, a pencil and give them access to the counters.</li> <li>Firstly ask children to trace around their hands – see if children problem solve by helping each other and tracking each other's hands. Make sure the children write down their estimates before starting to count out their counters. You can use discussion and support children with this. Encourage them to compare their hand tracing to their friends and pose questions which encourage children them to think about whether their tracking is bigger or smaller and what does that mean for their guess.</li> <li>Once the children have all estimated ask them to place the counters onto their tracing. What is the actual amounts? Was the actual amount more or less than their original estimates.</li> </ul>
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Extension Opportunities	<ul> <li>✓ Make a list of whose hand tracing has the most, least, same etc.</li> <li>✓ Try tracing different things such as feet or a box/container and estimate how many it will take to fill the tracing.</li> <li>✓ Try this on a larger scale outdoors. Trace something using chalk and estimate for example how many large wooden blocks would fill the tracking.</li> </ul>