

Carpentry Table: Exploring Measurement

Step in Progression	Interaction Ideas (Carpentry Table)
Identifying the attribute	<p>You see the children playing at the carpentry table. As you interact with them draw their attention to the attributes of the wood, tools and other materials they are using. Extend their understanding by naming the attributes you are focusing on. For example:</p> <ul style="list-style-type: none"> • I see you have a long piece of wood. Can you get another long one? • I see you have a short piece of wood. Can you get another short one? • Your box holds a lot of wood. Can you find a box that does not hold as much? • Your box is nearly empty. Can you find another empty one? • Daniel's piece of wood is heavy. You feel it. Now can you find a heavy piece too? • Sarah's piece of wood is light. You feel it. Now can you find a light piece too?
Direct comparison	<p>As opportunities arise at the carpentry table ask children questions which encourage the comparison of the length, weight and volume of the wood, tools and other materials they are using. For example:</p> <ul style="list-style-type: none"> • Is your screwdriver shorter than Alice's one? How can we check? • Can you find a piece of wood that is longer than Jessica's? Let's check by lining them up. • Can you find 3 sticks shorter than Tane's? Which is the shortest? How can you tell? • I see you each have a screwdriver. Which one is the shortest? How can we be sure that's the shortest one? • I see you each have a piece of wood. Which one is longer? Let's find out. • I see you have a pile of screws. Which one is the longest? How do you know that's the longest?
Indirect comparison	<p>The children want to move the carpentry table outside. Take the opportunity to discuss how they could use an item such as string to find out whether the table would fit through the door.</p> <ul style="list-style-type: none"> • If we want to take the table outside would it fit? • Let's use this string to find out. How far along the string does the table come? • Now let's measure the door. The table came to here on the string, would that fit through the door? • How do you know?
Using something to measure	<p>You see the children playing at the carpentry table. As appropriate, encourage them to explore ways they can use the objects they have available to measure lengths. For example</p> <p>Comparing length:</p> <ul style="list-style-type: none"> • Which of those pieces of wood is longer? Let's use the screws to measure. • How many screws long is that piece? Let's check.

- So which is the longest? How many more screws long is it?

Finding the right length:

- Rene needs a piece of wood which is 3 hands long. Can anybody find me one?
- Is that one the right length? How do you know? Show me how you measured.

Estimating measures:

- That's a long piece of wood. How many hand spans long do you think it is?
Let's check.
- How many pieces of wood do you think we can fit in this box? Let's find out.