Measuring with modelling!

This problem solving through junk modelling activity provides opportunities for children to plan and use different methods to problem solve.

What you will need:

- Large junk modelling equipment, e.g. cardboard boxes, cardboard tubes, plastic milk bottles
- Tape, string, glue etc.
- Broom sticks, milk crates, sheets
- Large paper e.g. roll of lining paper
- Pens, mark making equipment
- Camera
- Clipboards.

Activity outline:

- Introduce the activity to the children. They are going to plan and make a house for the three bears / a rocket ship / a new superhero hideout / a new pirate ship for Jake / a palace for Elsa (you should choose the aim based on your own children's current interests)
- Talk to children about how architects plan their buildings by drawing out the details first
- Start by drawing out their plans on the lining roll. What will it look like? What will they need to build it? How tall will it need to be? How wide will it need to be? Tell the children the plans will be used to make the building so they need to show all the detail
- Bring all of the materials the children will need together and plan how the structure will be made. What will we need to do first?

- Start the structure and encourage the children to work through the plan and problem solve as they go along, e.g. how can we attach the tubes to the boxes? How can we make it tall enough?
- Develop the children's team work and help them to work together to develop the structure
- Once you have completed it, check if it is wide enough and tall enough for the original intention and decorate it
- Take photos of the whole process from start to finish. The children can make a scrapbook of the processes, sequence them correctly and show their creation to their family.

Working with babies?

You can support the babies and toddlers to make smaller scale junk models and talk through how to make them tall, short, big, small. With the younger children the focus should be more on their motor skills and how they think things through for themselves with your support.