TO DO:
Goldilocks has broken the bear’s chair and eaten their porridge. She needs to make it up to them. They need a special chair for their video call with America. Could you help? Could you make a chair that they can all sit on together? It needs to be comfortable and strong. Don’t forget to test it to make sure it is just right!

ACTIVITY INSTRUCTIONS: WHAT WILL CHILDREN BE DOING?
In this activity, children will act as engineers in order to help Goldilocks build a chair that seats ALL the bears at once.

Help them identify the problem to be solved, talk about what the characters need and come up with some ideas. Then start designing a solution!

Think about special features. What would make the chair comfortable, easy to get into and useful for their meeting?

Work together to build, test and improve a design and then allow the children to demonstrate how their design works, telling you what they did and what they used. You are now working just like real engineers!

RESOURCES:
Use the following to build a chair for all of the bears. Remember to add some special features! These are just suggestions – just use items you have available.

- Three teddy bears of different sizes
- Tape
- Cardboard / paper
- Cotton wool
- Egg boxes
- Scissors
- Plastic / paper cups
- Paper clips
- String
- Lolly sticks
- Fabric / material
- Markers / pens
Stem in the story:

Why not listen to the story again and write down everything that is ‘engineered’ or made? Did you know that engineers design and make food packaging, furniture, electronic devices and help us cook by generating power and connecting it to our houses and buildings. Engineering and Science is everywhere.

Helpful hints:

What was different about each of the chairs in the story?
What special features would you like in a chair? The more imaginative the better!
Why not measure and weigh your three bears before you start – you need a chair that is strong enough and the right size.
Need inspiration? Then look at our STEM Ambassadors examples!

Talk to your little engineers about:

What would make a chair comfortable, easy to get into and useful for their meeting?

Follow on activity:

Could you make a chair from cardboard (and nothing else) that you can sit in yourself?
Find out what we mean by the word ‘ergonomics’. Human-Factors or Ergonomics are a huge part of designing and making things. Engineers need to make sure things are comfortable, safe and fit for people to use.

Take care:

In all of these activities please make sure you are working safely. Please have fun but supervise your children to make sure your environment is safe and you take care with any craft equipment or materials you are using. Engineers and Scientists always do!