

JACK & THE BEANSTALK ACTIVITY

TO DO:

There are lots of STEM challenges you can undertake in this story! You could:

1. Make a contraption to pick up an egg from a distance
2. Make something to help Jack escape quickly
3. Make something that would help Jack protect the egg as he drops it down the beanstalk?
He doesn't want it to smash on the ground.

Here are some suggestions for activity number 3.

ACTIVITY INSTRUCTIONS: WHAT WILL CHILDREN BE DOING?

In this activity, children will act as engineers in order to help Jack get his egg down the beanstalk.

Why not paint an egg (hardboiled is safest) to look like the golden egg. Create something to protect it using the resources below then drop it from 50cm height. What happened?

Try it from 1m, 1.5m or even higher. Keep trying until you reach your design limit and your boiled egg cracks. Could you risk a raw one? Make sure you test your 'egg protection design' with a hardboiled egg first, or it could get messy!

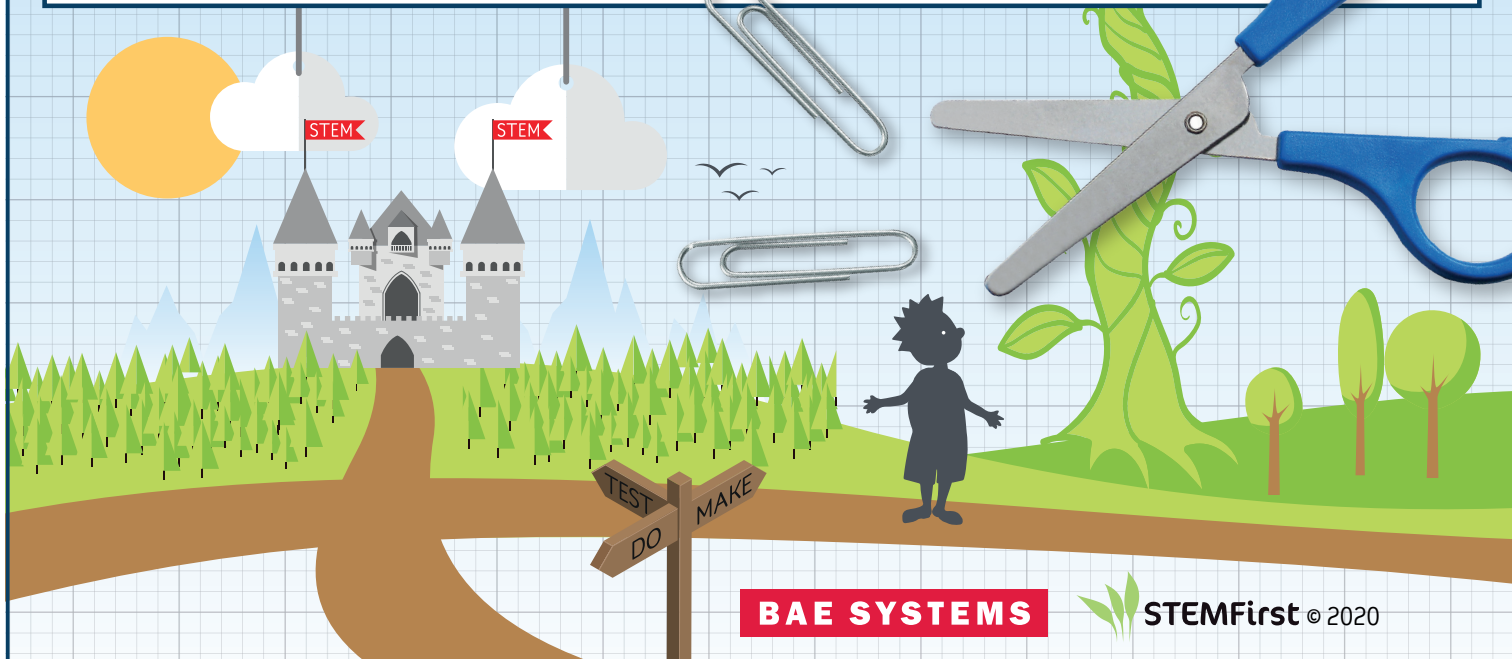
Testing, improving and finding the limit of a design is how engineers work in the real world.

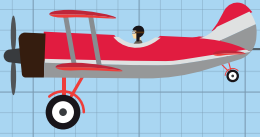
RESOURCES JACK FINDS IN THE DRAWER COULD INCLUDE:

Use the following to try our egg drop or all of the challenges in this story.

These are just suggestions – just use items you have available!

- Paper clips
- Scissors
- Cardboard
- Tin foil
- Balloons
- Tape
- Lolly sticks
- Plastic / paper cups
- Cotton wool
- Markers / pens





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STEM IN THE STORY:

Read the story again and encourage your children to listen very carefully. Can they shout the word 'STEM' every time something that uses Science, Technology, Engineering and Maths is mentioned? Use your best Giant voice!

TALK TO YOUR LITTLE ENGINEERS ABOUT:

What problems need to be solved?

What happened when you tested your design?

WHY NOT THINK ABOUT:

What things in real life need to be protected so that they don't get damaged? Engineers design protection for lots of things from making sure cars protect their passengers, to egg boxes or other packaging to protect fragile items.

FOLLOW ON ACTIVITY:

Why not grow something yourself and measure it every day? You could even draw a graph! Grow a beanstalk by putting beans in a jar with damp cotton wool, or maybe try growing a sunflower.

Engineers and scientists take measurements to understand what is going on in the world. Did your plant grow steadily by the same amount every day or did something different happen?

Or how about choosing your favourite crisps or snack. Wrap one up very carefully, put it in the post and post it back to yourself. When it returns through the post, unwrap carefully and see how well you protected it. Are you a crisp protector or a snack smasher?

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!