

Teaching STEM through Fairy Tales

The Princess and the Pea

The Challenge

Students are challenged to design and build a parachute that will help the princess descend to the ground as quickly as possible.

The Criteria

- Parachutes will be made out of provided supplies.
- Parachutes must carry the princess (designated cargo).

The Constraints

- Parachutes must be no larger than 15" in any direction.
- Parachutes will be tested by dropping them one by one from a designated balcony or stairwell. If none are available, teachers may provide a parachute dropper that attaches to the ceiling or students may drop their parachutes from a height of 48".

The Materials

- | | |
|---|---|
| <input type="checkbox"/> Tissue Paper | <input type="checkbox"/> String or Yarn |
| <input type="checkbox"/> Glue Sticks | <input type="checkbox"/> Designated Cargo |
| <input type="checkbox"/> Scissors | <input type="checkbox"/> Parachute Dropper (optional) |
| <input type="checkbox"/> Measuring Tape | |

Think of Ideas: How do we solve the problem?



Find a Solution:
Which idea will work best?

Design:
How will we design and build it?

Test and Evaluate: How do we know we solved the problem? What can be improved?

Share your Success!