

Lesson Plan: First or Second Class

Introduction

- Read the story "The Three Little Pigs" aloud to the class.
 - Pause reading when the wolf approaches the houses to build suspense and engage students in the upcoming activity.
-

Development

2. Discussion Questions

- **Shapes and Structures:** "What shape do you think you will make your house? Why?" Will you add a roof? What shape will that be?
- **Stability Factors:** "What do you think could help your house stay up?" "What do you think could make your house less stable?"
- **Security and Solidity:** "What do you think could make your building more secure and solid?"

3. Task Setting

- **Pairing Students:** Pair the children in mixed-ability pairs or groups of three to encourage collaborative learning and idea sharing.
- **Exploration Time:** Allow ample time for students to explore the materials and construct their houses using cocktail sticks and marshmallows.

4. Mini Tests

- Conduct informal tests by walking around the room and using paper fans to gently blow on the houses.
 - Encourage students to observe the effects and make real-time adjustments to their constructions.
-

Conclusion

5. Final Testing

- Test each house using a fan and then a hairdryer from various distances. This will involve questions related to how to conduct this test in a fair way,

ensuring that each test is the same distance and same device used to try to blow it down for each house, each time.

- Observe and note which houses stand the longest and which collapse.

6. Reflective Questions

- "Why do we think this house stood the longest?"
 - "Why do we think some houses fell down?"
 - "What could we change to make the houses stronger?"
 - "What materials might be better to use for building?"
-

Enhancements for Engagement and Learning

- **Visual Aids:** Use pictures or models of different shapes and structures to inspire ideas.
- **STEM Vocabulary:** Introduce terms like "stability," "structure," "foundation," and "architecture."
- **Real-World Connections:** Discuss how engineers and architects use similar principles when designing buildings.

Wrap-Up

- **Sharing:** Allow each pair to present their house to the class and explain their design choices.
- **Reflection:** Have a brief discussion on what they learned about building and teamwork.
- **Follow-Up:** Suggest a take-home activity, such as drawing a blueprint of their ideal house using the lessons learned.