

## The Three Little Pigs Architectural Challenge

Kids working together in groups to design and build a house using a finite amount of materials that the big, bad wolf cannot blow down.

Group 1 : To build a house made of toothpicks and yarns.

Group 2 : To build a house made of art paper

Group 3 : To build a house made of clay/playdoh

### **Procedure**

1. Read aloud the book of The Three Little Pigs to all groups. Optional: Offer the kids to read in front of their friends.
2. After reading discuss with the kids about the importance of good, healthy and strong house, taking into consideration of local weather and natural disasters (sun, rain, wind, earthquake, tornados, etc)
3. Divide kids into 3 groups. Introduce them to the challenge requirements and supplies.
4. Encourage kids design in drawing before they build it.
5. Have the kids to present their built design and test it with required equipment.

### **Reflection**

1. What material best to withstand the huffing and puffing of the big bad wolf?
2. Why do you think this material were more effective than others?
3. Was your team able to design and build the house that survive the Big Bad Wolf?
4. What huffing and puffing level did your house withstand?
5. What would you do to improve your design?
6. In the real world, what are jobs/professions needed to build a house?

### **Group 1**

To build a house made of toothpicks, yarns and tape.

Challenge: Your team need to design and build a house that withstand The Big Bad Wolf huffing and puffing using the assigned materials.

Materials: Toothpicks, yarns and tape.

Design Requirements:

1. Your house must have foundation, wall (with door and window) and roof.
2. Your house must be built only using the material provided for you.
3. Your team must have "fair-share work", listen to all ideas!
4. Your team only has 20 minutes to complete this task and be ready for testing.

### **Group 2**

To build a house made of art paper and tape

Challenge: Your team need to design and build a house that withstand The Big Bad Wolf huffing and puffing using the assigned materials.

Materials: art paper and tape.

Design Requirements:

1. Your house must have foundation, wall (with door and window) and roof.
2. Your house must be built only using the material provided for you.
3. Your team must have "fair-share work", listen to all ideas!
4. Your team only has 20 minutes to complete this task and be ready for testing.

### **Group 3**

To build a house made of clay/playdoh, toothpicks, yarn, art paper and tape

Challenge: Your team need to design and build a house that withstand The Big Bad Wolf huffing and puffing using the assigned materials.

Materials: clay/playdoh, toothpicks, yarn, art paper and tape

Design Requirements:

1. Your house must have foundation, wall (with door and window) and roof.
2. Your house must be built only using the material provided for you.
3. Your team must have "fair-share work", listen to all ideas!
4. Your team only has 20 minutes to complete this task and be ready for testing.

