



PUMPKIN DROP



Objective: Students will use critical thinking, creative thinking, and problem solving skills to design a pumpkin holder to protect a pumpkin dropped from the roof of the school to the ground below.

Requirements: All students in the 4th-6th grades are invited to submit a design proposal by completing the attached Pumpkin Drop Packet which includes thinking skills activities. Students may work alone or with other students, but help from adults should be minimal.

***Do not put your name on the packet, as the design proposals will be chosen anonymously. Instead put the name of your design.

The pumpkin must be at least the size of a soccer ball. The pumpkin, along with the holder, should be able to be carried by one student without help and able to be wrapped in a tarp to be pulled up on the roof. Please keep the safety of participants & observers in mind at all times.

Dates: Pumpkin Drop packets should be completed and turned in to the box in the office by Wednesday, October 21. The top 25 design proposals will then be chosen and announced Friday, October 23. Make sure your names(s) and the name of the design are printed clearly on the outside of the holder.

The Pumpkin Drop will take place at 9:00 am on Wednesday, October 28 in the Cherokee Bend amphitheater. Parents are welcome to come and watch.

Materials: Any materials that are appropriate for school other than boxes and packing peanuts are fine. There is a \$5 price limit on materials (other than the pumpkin). ***No boxes or packing peanuts allowed...think outside the box.***

Email Mrs. Kim Hutchens if you have any questions
at hutchensk@mtnbrook.k12.al.us.



PRODUCTIVE THINKING: MATERIALS



Make a list of many, varied, and unusual materials that you could use to protect your pumpkin. Remember, you cannot use boxes or packing peanuts. When you think your list is complete, ADD more ideas.



PLANNING

Think of all the steps needed to complete your pumpkin protector and put the steps in order.

PRODUCTIVE THINKING: DESIGN

Sketch at least THREE different designs for pumpkin holders. Remember that the pumpkins will be dropped from the roof of the school. Try to think of unique designs that no one else will use. Give each design a name.





DECISION MAKING

1. List the names of your 3 designs from the previous page.

- 1.
- 2.
- 3.

2. Write at least five questions (criteria questions) to help you evaluate your alternatives.

Examples – Can I easily find the necessary materials?
 Will this design cushion the landing of the pumpkin?
 Do I know how to make this device without help from an adult?

- 1.
- 2.
- 3.
- 4.
- 5.

3. Ask yourself each question for each design. Give each question an honest answer about each design. Use your answers to help you make a decision.

4. State your **final decision** and give many, varied reasons for your decision. Turn your criteria questions into statements below.

DETAILED PICTURE

Draw and label a detailed picture of your design.



Design Name: _____