



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.

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 11. The top 20 design proposals will then be chosen and announced by Friday, October 13.

The Pumpkin Drop will take place at 9:00 am on Tuesday, October 31. Parents are welcome to come and watch.

Materials: Any materials that are appropriate for school other than boxes, coolers, packing peanuts, bubble wrap, or pillows may be used. You may **NOT** use tape to enclose the outside of the pumpkin. There is a \$10 price limit on materials (other than the pumpkin). **Again, NO boxes, coolers, packing peanuts, bubble wrap, or pillows are allowed.** Be creative and think outside the box.

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



Name(s) _____

*Remember the work in this packet is what determines if your idea will be chosen for the pumpkin drop.
Please show your best work.*

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, packing peanuts, bubble wrap, or pillows. 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 your pumpkin 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?

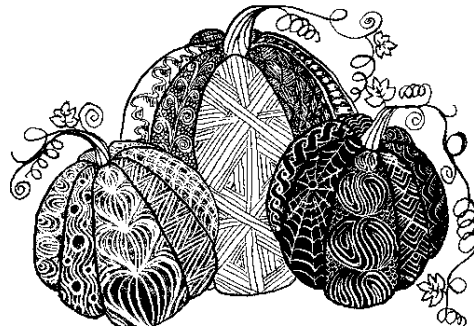
- 1.
- 2.
- 3.
- 4.
- 5.

3. Answer the questions above for each design. Give each question an honest answer. Use your answers to help you make a decision. You may use the back and/or add additional paper to answer the questions for each design.

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 the design you chose.



Design Name: _____