Pentominoes and Milk Carton Geometry

1. Arrange 5 squares ( 2” x 2”) so that the whole side of any square is touching the whold side of another square. ( no partial touching, no corner touching)

 2. Guess which pentomines can be folded to make an open box.

These guesses can be recorded as a class graphing activity.

1. Check your guesses by actually folding the pentominoes into open boxes.

 4. Start with a mild carton with the top cut off.

 Try to cut the milk carton into the shape of a pentomino.

 Try to cut milk cartons into all the pentomino shapes that can be folded into boxes.

 5. How many ways can you fit 2 pentominoes into this shape of 10 squares?

 6. How many different ways you can fill a 4x5 grid with the shapes of

 **4** pentominoes that ***can***  be folded into boxes. (box factory)

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