Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

It’s (zipped) In The Bag

INVESTIGATE

* Look at the three different types of bags

|  |  |
| --- | --- |
| How are they similar? | How are they different? |
|  |  |

Draw and Label a picture of how the baggie sealing mechanism works:

EXPLORE

What will you design to hold a file folder closed but still be able to be opened? Draw and label your idea.

EXPLAIN

1. Write an explanation. How does your mechanism hold the two sides of the folder together? What forces do you think are at work.

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1. Draw what you actually built. Use arrows to label the forces involved.
2. Describe how your mechanism is similar to and different from the baggies we investigated with.

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1. Have you made a single, double, or multitrack sealing mechanism?

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EXTEND

Investigate the zipper style bag

1. How is this similar to and different from the other baggies?

|  |  |
| --- | --- |
| How are they similar? | How are they different? |
|  |  |

1. Describe what the slider does as you move it back and forth.

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1. Make a sketch of how the zipper works.

EVALUATE

1. Select one idea - the zipper, the sealable plastic fasteners, or your own sealing device - and invent a new use for that mechanism. Write an explanation of your innovation.

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