Do Not Open Your Brown Paper Bag!

Inside this very special bag you are going to find an assortment of items.

Your task is to determine what these items have in common.

Try to create as many answers as possible. Remember that ALL items must fit the criteria.
Mistakes Become Opportunities!

Web links:
mag.amazing-kids.org/non-fiction/stories/inventions-that-were-mistakes/

Book:
Mistakes that Worked! Charlotte Jones

Materials Needed:
Strip of Velcro
Chocolate chip cookie
Tea Bag
Silly Puddy
Post It Notes
Ivory Soap

Give each group of students a brown bag with the listed items. Have them work together to figure out how the
items are related. Practice fluency, flexibility, originality in their solutions. Once many teams have had a chance to share their thinking, explain that all of these items were truly MISTAKES THAT WORKED!

Hand out descriptions of the inventions. Have them work each story into a short improvisation for the audience.

Allow students to share any real life experiences of personal mistakes that became opportunities.

Ideas for journaling:

1. Write the word – MISTAKES as an acrostic poem.
2. Read the following MISTAKES poem and respond to the given questions.
3. Have them summarize MISTAKES THAT WORKED in 6 word poems, rhyming verse, 20 word summaries, etc.
I hope that in this year to come, you make mistakes. Because if you are making mistakes, then you are making new things, trying new things, learning, living, pushing yourself, changing yourself, changing the world. You’re doing things you’ve never done before, and more importantly, you’re Doing Something. Don’t freeze, don’t stop, don’t worry that it isn’t good enough, or it isn’t perfect. Whatever it is: art, or love, or work, or family or life. Whatever it is you’re scared of doing, Do It! Make your mistakes, next year and forever.

-Meil Gaiman

Mistakes Journal Entry

1. Do you agree or disagree with the Mistakes Poem? Give reasons for your choice.

2. Can you site specific examples in your life when you tried something new, made a mistake, and learned as a result?

3. Give specific examples from your life or from the lives of famous individuals who overcame a fear to accomplish something amazing.
“Mistakes” that became Opportunities

1. **Velcro**
   While walking his dog, George de Mestral found that he had picked up many cockle-burrs in his socks and his dog's ears and fur. He investigated why these burrs could attach as they did and realized that it was due to the hooks on the burrs and the loops in the fur of his dog and his socks. He created the nylon version of the hooks and loops and made Velcro!
   http://inventors.about.com/library/weekly/aa091297.htm

2. **Nestles Toll House Morsels**
   In 1930, Ruth Wakefield was mixing a batch of cookies for her roadside in guests when she discovered that she was out of baker’s chocolate. She substituted broken pieces of Nestle’s semi sweet chocolate, expecting it to melt and absorb into the dough to create chocolate cookies. That didn’t happen, but the surprising result helped to make Ruth Wakefield one of the 20th century’s most famous women inventors. When she removed the pan from the oven, Wakefield realized that she had accidentally invented chocolate chip cookies.

3. **Tea Bags**
   Originally intended as samples, tea merchants began sending out teas in sewn silk bags. Some recipients of the bags thought they should put the entire bag in hot water and brew it. Later, the idea for tea sold in bags came from this mistaken identity for tea samples.

4. **Silly Putty**
   Silly Putty was originally invented by James Wright, working at General Electric’s New Haven, Connecticut lab in 1943. At the time, the Allies were desperately short on rubber thanks to Japan invading various rubber-producing countries in the Pacific Rim. As a result of this, the U.S. government enlisted the aid of various companies to try and invent a synthetic rubber that could be made of readily available materials. It was during one of these attempts to create synthetic rubber that Wright mixed boric acid and silicone oil, making the first Silly Putty, which initially became known as “Nutty Putty”. Although the goo produced by the mixture obviously wasn’t likely to make a good rubber substitute by itself, Wright did discover it had a variety of interesting properties, but he still couldn’t find a good practical use for it. Wright then sent samples of it to scientists all over the world to try to see if they could think up or discover a use for it that he missed. Unfortunately, nobody he sent it to could come up with a practical use for his putty either, and the invention stayed in relative obscurity for around six years.
5. **Post it Notes**

There were actually two accidents that lead to the invention of the Post-It note. The first was by Spencer Silver. According to the former Vice President of Technical Operations for 3M Geoff Nicholson (now retired), in 1968, Silver was working at 3M trying to create super strong adhesives for use in the aerospace industry in building planes. Instead of a super strong adhesive, though, he accidentally managed to create an incredibly weak, pressure sensitive adhesive agent called Acrylate Copolymer Microspheres.

This adhesive did not interest 3M management as it was seen as too weak to be useful. It did have two interesting features, though. The first is that, when stuck to a surface, it can be peeled away without leaving any residue. Specifically, the acrylic spheres only stick well to surfaces where they are tangent to the surface, thus allowing weak enough adhesion to be able to be peeled easily. The second big feature is that the adhesive is re-usable, thanks to the fact that the spheres are incredibly strong and resist breaking, dissolving, or melting. Despite these two notable features, no one, not even Silver himself, could think up a good marketable use for it. Thus, even with Silver promoting it for five years straight to various 3M employees, the adhesive was more or less shelved.

For the rest of the story, search here:


6. **Ivory Soap**

When an employee of Proctor and Gamble Soap company left the mixing machine on and went to lunch, he came back to find a very airy mass of “White Soap”. He decided to pour it into molds and then sell it anyway. Weeks later customers began to write to the company requesting the wonderful soap that floats!

http://www.ideafinder.com/history/inventions/ivory.htm