Common Threads

Art | Tornado in a Jar

What you need:

- Glass jar with lid such as a clean spaghetti sauce jar (an empty water bottle works, too)
- Water
- Dish soap
- Hot glue gun (optional)
- Glitter (optional)

Directions:

1. Fill a glass jar with water, leaving about 2 inches on the top.
2. Squirt in some dish detergent.
3. If you wish, you can add a pinch of glitter, for visibility.
4. Cap the jar tightly. You may wish to glue it closed
5. Rotate the jar to create the tornado.

WHAT'S HAPPENING? **Friction**

As you twist the jar, the water inside up against the glass is pulled along due to its friction against the glass walls. The fluid toward the inside takes longer to get moving. But eventually both the glass jar and the fluid are spinning as you rotate the jar. When you stop rotating the jar, the fluid inside keeps spinning. A mini twister can be seen for just a few seconds when the outer fluid slows down and the inner fluids continue to spin rapidly.

Wellness | Challenges to Change Your Life

What you need:
- paper or notebook
- pencil

Many people have a list of the things they want to do with their lives. Some lists are vague mental ideas, and other lists are specific and enumerated. Brainstorm the general topic of "things you want to accomplish or experience in life." Journal over the summer about the activities you have completed from your list.

Examples for your list:

- read everyday for an hour
- call an old friend or two . . . or more
- write a letter to a family member
- give up TV for a week
- introduce yourself to a new person each day

- laugh until you cry
- go to a local art or historical museum
- memorize a poem and share it with someone
- visit a relative's grave
- learn to cook one good meal

Science | Forensics- Fingerprints

This is an exercise to show how fingerprints can be lifted off of objects and how to analyze them.

- scissors
- pencils (dark lead)
- paper (plain)
- fingerprint sample handouts (attached)
- clear "objects" such as picture frames, paperweights, vases, knick-knacks, etc. l)

Instructions:

The first thing you should do is gather a few objects that have enough flat surface space to lay a piece of tape flat. For example, the side of a drinking glass, the flat side of a remote control, computer mouse, or a book. Wipe them all down and let them dry. The oils in our hands is what allows our fingerprints to attach to different objects. Touch all of the objects with your hands.

Now, practice fingerprinting by rubbing a soft lead pencil on a piece of paper, placing your fingertip on it without pressing too hard, and then touching your fingertip on the STICKY side of a piece of tape. Then tape the tape to a fresh piece of paper. Your fingerprint will show clearly, as long as you didn't rub your finger sideways, press too hard on the pencil markings, or otherwise smear the image. Once you have practiced a few times, go ahead and fill out the Personal Fingerprint Identification Form; then determine which type fingerprint each of your fingers has.

Now you are ready to "lift" the fingerprints from your objects to match them to your fingers. You can also try doing this with other family members to see if you can pick out someone's distinct print on an object.

Write | Personal Time Capsule

Time capsules allow us to look back in time and discover what was different or the same from our current lives. Make one of your own to look at in the future. Instructions attached.

Personal Time Capsule

What you need:

• Containers with lids (metal coffee cans with lids, large plastic coffee cans with screw-on lids, plastic containers (Rubbermaid, etc.) with lids, an empty oatmeal container, an empty shoebox, an empty cereal box without the bag.)

• Glue or duct tape

• Markers

• Various personal items (see below)

In this activity, you can capture and preserve current parts of your life for the future. The capsules don't need to be buried, but store them in a safe place until the time comes to open them.

Decorate the time capsules (if you want to). Paint the outside, or use permanent markers (it depends on what the container is made of). Tape or glue a piece of paper with the date/year of when the time capsule should be opened. Ten years is recommended so you can see how you have changed growing into adulthood. Fill your time capsule. There is a list of suggested items below.

Sealing your time capsule can be done in a variety of ways, but using duct tape (clear tape won't stay sticky long enough) or gluing the lids closed will work. If the capsule is a Rubbermaid-type box, just snapping the lid closed should be enough. However, it is very tempting to open a time capsule that isn't sealed!

Open in ten years!

Possible items to place in time capsule

• Letter to your future self—describe yourself, your hopes for the future, and any predictions you might have for your life.

• Photos of friends, family, pets, house, school, car—whatever is important to you at this time.

• Newspaper articles showing current events or trends. Both local and world news.

• Letters—ask your parents to write a letter to you, talking about the current day or about what they hope for the future. Friends can also contribute letters. These should be sealed unread and placed in the time capsule.

• Filled journals or paper calendars.

• Price tags of items/store receipts (to see how prices change).

• Items that are important to you—toys or trinkets. Suggestion: Label these items because you might not remember why it was important to your teenage self.

• Movie ticket stubs.

• Lists!

<u>Here are some suggestions:</u>

- Favorite songs

- Favorite outfits

- Favorite things in your room

- Favorite friends

- Favorite foods

- Favorite books

- Favorite movies

- "Things you hope to do before you die" (Bucket list)

- List of what you hated about being a teenager

- Websites you look at every day

   Do not put anything in that will rot or leak (favorite candy bar for example).

Fingerprint Types

Central Pocket Loop

Accidental

Double Loop

Plain Arch

Plain Whorl

Loop

Tented Arch

Personal Fingerprint Identification

Type

Type

Type

Type

Type

Type

Type

Type

Type

Type