Easy & Inexpensive Craft Ideas

Construct your own chalkboard table

What you will need:

An end or side table (you can purchase one from Ikea for under $10.00)

A can of Rust-oleum chalkboard paint (you can purchase this from Wal-Mart for $4.00)

Tape

Newspaper

After purchasing your table or re-purposing an older table, tape the newspaper around the top of the table. Next you will spray the Rust-oleum chalkboard paint all over the table top. 2 coats of paint are recommended. Let the table dry for 24 hours and then take of the tape. Now you and your little ones are ready to have some fun! For more information visit: http://www.sixsistersstuff.com/2013/08/cheap-and-easy-diy-chalkboard-table.html

Build Your Own Lava Lamp

What you will need:

A large 2 liter empty soda bottle or large smooth water bottle (clear)

Food Coloring (not yellow)

Vegetable Oil

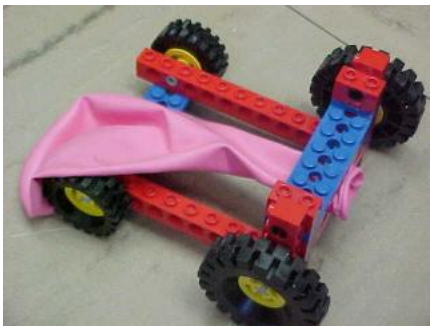
Water

Funnel

Super glue

Start by mixing a large glass of water with your choice of food coloring and set aside. Next use your funnel to fill the bottle half full of vegetable oil. Then take your colored water and pour it into your bottle. Finally Super glue your lid closed and have fun! http://www.thecraftedsparrow.com/2012/07/summer-fun-project-diy-lava-lamps.html

Design Your Own Lego Balloon Racecar



What you will need:

Legos

Wheels for Legos

A balloon

You can design your own Lego racecar your imagination is the limit! Just make sure that you are able to attach the balloon to your racecar in a fashion that lets the balloon rest length wise along the car. After you have built your race car and attached your balloon fill the balloon up with air and race your friends and family! For designs or more information visit:
http://www.marshall.edu/LEGO/lessonplans/BalloonCar/BalloonCar.html

Construction Themed Mobile

This is a simple mobile made up of construction vehicles (bulldozer, dumptruck, crane, truck).

What you will need:

- a printer,
- paper,
- some crayons, paint, markers or pencil crayons,
- scissors,
- glue,
- string or yarn
- small paper plate or circle of cardboard (old cereal boxes are a good source of cardboard) AND two straws or sticks

Instructions:
Print out the template of choice. You can print out as many as you want to fill up your mobile. You can also combine this mobile with other mobiles on the site (like the cars mobile).

Color (where appropriate) and cut out the template pieces along the dotted lines.

Fold the template pieces in half and glue the back and front together. Let dry.

Poke a small hole in the top of each piece and tie with yarn or string to the mobile you've chosen

Templates:

- Close the template window after printing to return to this screen.
- Set page margins to zero if you have trouble fitting the template on one page (FILE, PAGE SETUP in most browsers).

Template 1: (color) or (B&W)

Template 2: (color) or (B&W)

Template 3: (color) or (B&W)

Template 4: (color) or (B&W)

Build Your Own Toolbelt!

Take Your Building to the Next Level with These Crafts

Construct your own pizza box solar oven

What you will need:

A pizza box

Newspapers

Tape

Scissors

Black construction paper

Clear plastic wrap

Aluminum foil

Stick to prop the lid up

Make sure the cardboard is folded into its box shape. Carefully cut out 3 sides of a square in the lid of the box. Do not cut out the fourth side of the square, which is the one closest to where the pizza box lid hinges. Gently fold the flap back along the uncut edge to form a crease. Now, wrap the underside (inside) face of the flap that you made with aluminum foil. Tape it so that the foil is held firmly in place, but so that there's not too much tape showing on the foil side of the flap.

Open the box and place a piece of black construction paper so that it fits the bottom of the box. Tape it by the edges. (Use two pieces.)

Roll up some newspaper and fit it around the inside edges of the box. This is the insulation. It should be about 1-1 ½" thick. Use tape (or other materials you can think of) to hold the newspaper in place. Tape it to the bottom of the box so that you can close the lid. Finally, cut plastic wrap an inch larger than the lid opening on the box top. Tape it on the underside of the lid opening. Add another piece of plastic wrap to the top of the lid opening. This creates a layer of air as insulation that keeps heat in the

box. It also makes a window you can look through at the food you're "cooking." BE SURE THE PLASTIC WRAP IS TIGHT.

You are almost done! According to NREL, the oven needs to sit at an angle facing the sun directly so you'll need to make a prop. You could probably just use a book or something under the hinged side of the oven. However, I missed this when I read the directions and we just put it flat on the ground. The flap of the box top needs to be propped open—a dowel or ruler works great. We used a wooden skewer that I broke the sharp point off of. This way you can change the amount of sunlight striking the oven window. Play with the angle of the flap to see how much sunlight you can get to reflect on the food. For more information visit: http://kitchenpantryscientist.com/313/

Fabricate Your Own Mason Jar Solar Light

What you will need:

Wide mouth mason jar (quart size)

Tissue paper 1-2 sheets (your choice of design)

Mod Podge

Paintbrush

Outdoor solar light (make sure the top of the solar light fits the opening of your jar)

Super glue

Start by cutting your tissue paper in small squares. Next use the Mod Podge to glue the pieces of tissue paper to the inside of the mason jar. Use your imagination and make the design all yours! After you have glued all of your pieces in place let the jar dry. Next place the top of the outdoor solar light into top of your jar. You can use waterproof adhesive on the solar light when place into the top of your jar to keep your masterpiece in good condition. For more information visit: http://www.smartschoolhouse.com/diy-crafts/mason-jar-solar-light/2

Create Your Own Starry Night

What you will need:

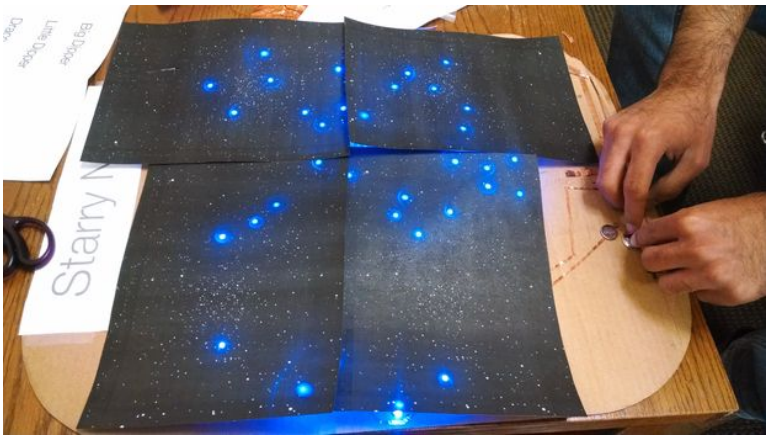
A lot of copper tape

(6) 3V coin cells

LEDs (about 60 of them)

Copper foil

Soldering Iron



It is important to first sketch out the entire sky (circuit) - where all the stars (Blue LEDs) go, where each of the constellation (Blue LEDs with Green edges) goes. Once you have figured that out, draw this circuit on a piece of cardboard. All the Blue LEDs will be connected in parallel on the main circuit

It is very important to understand how to make circuits using Copper Wire. A good place to learn about the basics is this place. This website teaches about folding, making curves, adding LEDs and using coin cells for paper circuits. I learnt from this website and it was easy to make the big sky circuits then.

All the blue LEDs will be connected in parallel on the circuit. One copper wire will be the positive end and the other one will be the negative one.

I recommend making the two wires (positive and negative) run parallel all along the circuit and then soldering the LEDs. Once you make the entire circuit, it should look like what's shown in the figure.

Quick Tip: Keep testing the LEDs at every few turns and folds you make with the copper wire as shown in the figure

Each of the constellations have a separate circuit. In this project, I shared the positive side of the copper wire from the main big circuit with all other smaller constellation circuits. Only the negative side of the constellation circuit is separate which has the green LEDs that act as edges to connect the stars thus highlighting the constellation. This separate circuit shares the positive side with the main big circuit. Once pressed on the name of the constellation [activating the switch], the green LEDs highlight showing the path of that constellation.

In order to make this circuit, you will have to perform several hacks like jumping positives and negatives over each other by not removing the sticky side of the copper tape, folding the copper tape in several different ways to maintain its conductivity, soldering at corners in case we had to stick two pieces of copper tape.

Also, at every point keep testing with LEDs to make sure both the circuits are working fine.

I recommend soldering the LEDs on the circuits to make the connections strong. The circuit should look like as shown in the figure. You also need to figure out a place to connect the batteries in the circuit. I chose to connect the batteries on the side and made them switches so that only when you press them, does the circuit activate.

Some suggestions:

Connecting the batteries at the right spot can be a challenge because the positive terminal is shared with 4 different circuits. So to make sure that all the blue stars are shining even when any or all of the constellation circuits are activated, we had to connect the batteries at the right spot. Soldering the LEDs, green as well as blue on the right sides and making sure it doesn't touch any other copper tape in between was important to make sure we don't activate other circuits by shorting any of them.