# Joey Mob
# Program Planner

**Attendance**:

/

Attendees / Total

| Theme | The Science of Flight | Meeting | Share | Date | |
|---|---|---|---|---|---|

| Time | Activity | Leader | Equipment Required etc. |
|---|---|---|---|
| 0.00 | Opening parade: | | Flag |
| 0.05 | Game: Feather Blow | | Feathers |
| 0.10 | Activity: The JS Blimp (Airship or Zeppelin) | | Strips of paper with the JS Law on it. |
| 0.20 | Game: Coming in for a Landing | | Straws and plane cut-outs (tissue paper) and a target. |
| 0.25 | Craft: A Joey Scout Propeller | | Straws, tissue paper, sticky tape, scissors, glue stick. |
| 0.35 | Game: Plane Race | | The Joey propeller |
| 0.40 | Activity: Balloon Rotocopter | | Instructions attached |
| 0.50 | Game: Helicopter | | Bean bag on rope |
| 0.55 | Closing parade: | | Flag, Prayer, notes |

## General Comments

**Coming in activity:** Paper Planes

NEVER throw a paper airplane at another person, animal, or object that could be damaged if you hit it. Paper planes can have sharp edges and points that can injure someone if you are not careful. Keep in mind that paper planes can curve or change direction after they are launched, so make sure your flying area is clear. When flying outdoors, never fly your plane near moving cars or run into the street after your plane. Plan ahead and fly in a park, playground, or backyard.

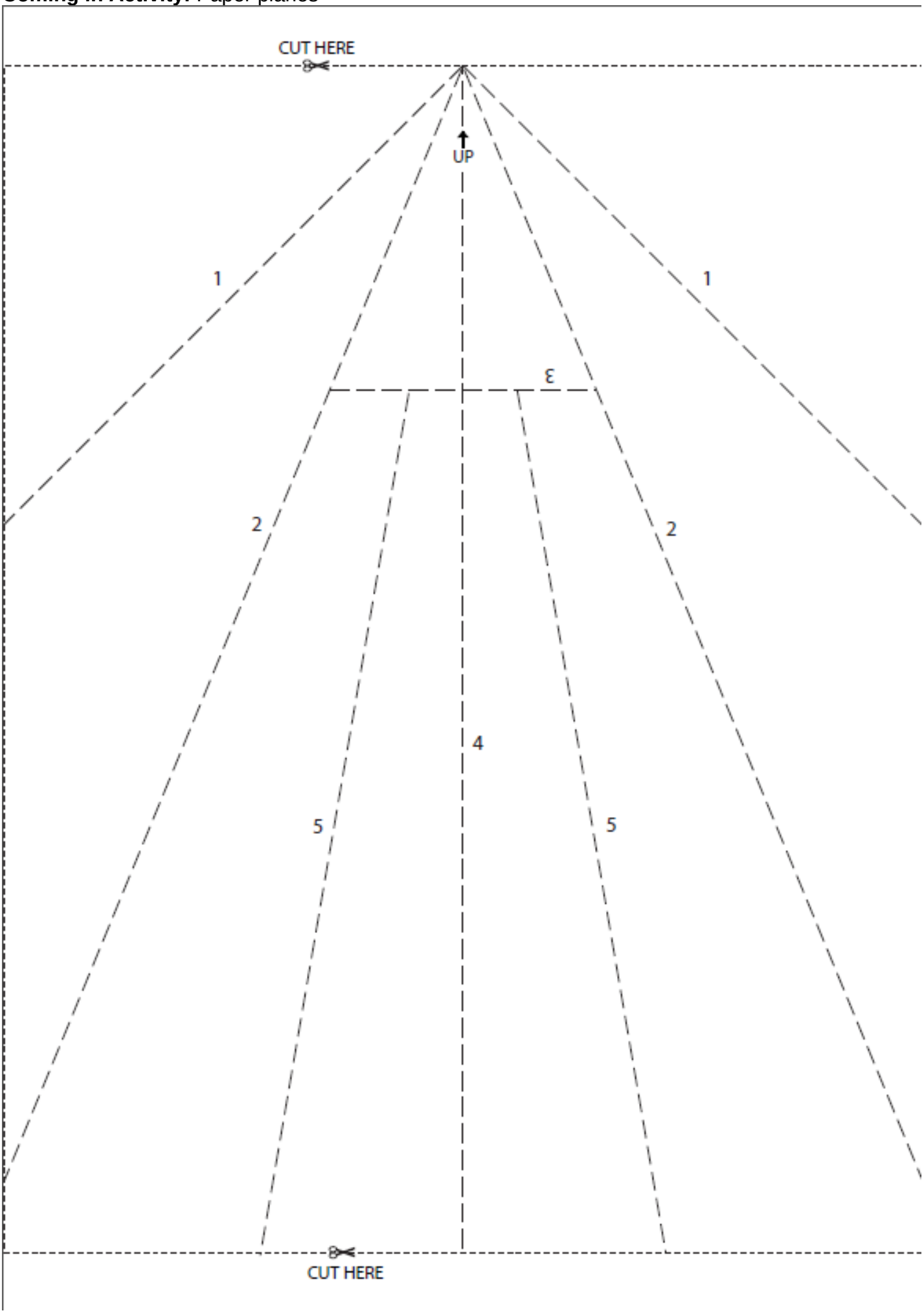
A Spare craft has been added to this program.

**Birthdays:**

**Next week:**

**Notes:**

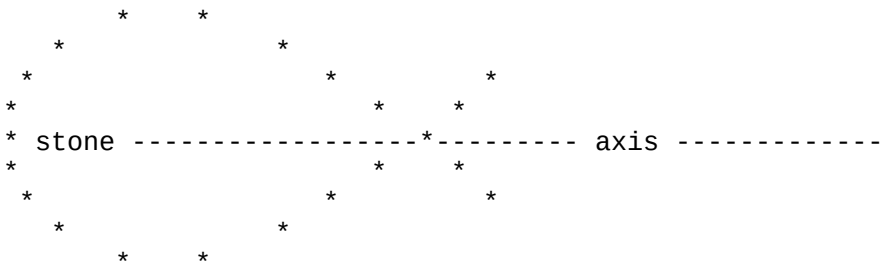
**Coming in Activity:** Paper planes



**Game:** Feather Blow
**Equipment:** Feathers
**Method:** Divide JS into two teams. The lead JS blows the feather into the air and the next in line blows it to the next JS etc. See if you can keep the feather from touching the ground and get it to the end of the line. The last JS can catch the feather and take it to the start of the line and start again.

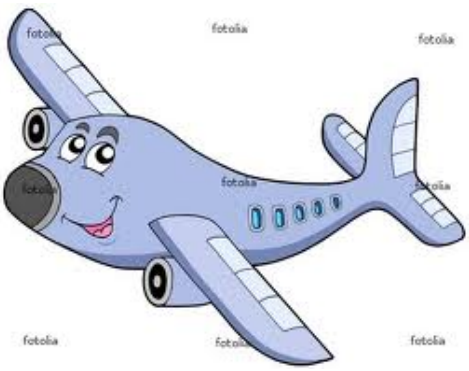
**Activity:** The JS Blimp (Airship or Zeppelin)
**Equipment:** Strips of paper as below with the JS Law on it.
**Method:** Cut a long strip of writing paper as shown and notch each end as indicated below:


Bend it over and slip each notch together. You will end up with a shape similar to a fish when looking through the opening:

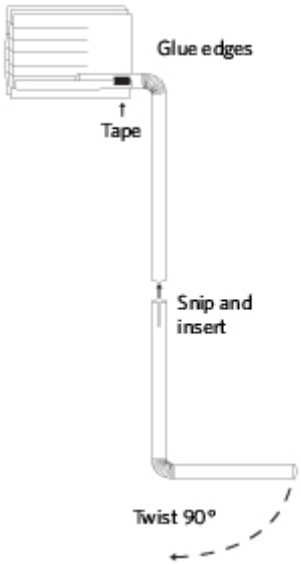



Be careful not to fold it at the front, it should be a curve.
That is all there is to assembly. Now place a small pebble (you could also use blutak or soft silly putty) where indicated and squeeze the stone with your thumb and forefinger. Throw the stone and paper belt straight up. If you do it right the stone will lift the paper to an altitude until the stone begins to fall back to earth. The stone falls out of the loop and the airship begins to spin over the axis and gently returns to earth. When it spins it blurs together and looks just like an airship.
Test Fly your Blimb!

**Game:** Coming in for a Landing
**Equipment:** Straws and plane cut-outs (tissue paper) and a target.
**Method:** Put you cut-out tissue paper planes at one end of the hall and a target on the floor at the other end. JSs use a straw to suck up the plane and get at close to the target as possible and then let it go to come in for a landing on the target. See how many bullseyes you get?
Some sample plane shapes:



**Craft:** A Joey Scout Propeller
**Equipment:** Flexible straws (2 per JS), some 10cm squares of tissue paper (to create a tassel 2-3 per JS), sticky tape, scissors and glue stick.
**Method:** Trim about 3 inches from the bottom of two flexible straws. Create the tassel. Stack three 10cm squares of tissue paper then use a glue stick to join them along one edge. Fringe the stack along the opposite side. Tape a corner of the stack to a straw just above the elbow, then wind the stack around the straw and secure it with more tape. Lightly crinkle the fringe to give it shape. Snip the other straw as shown, pinch the end, and slide it into the tasseled straw. Twist the straws as shown, then place the twirler in your mouth, release your hand, and blow.

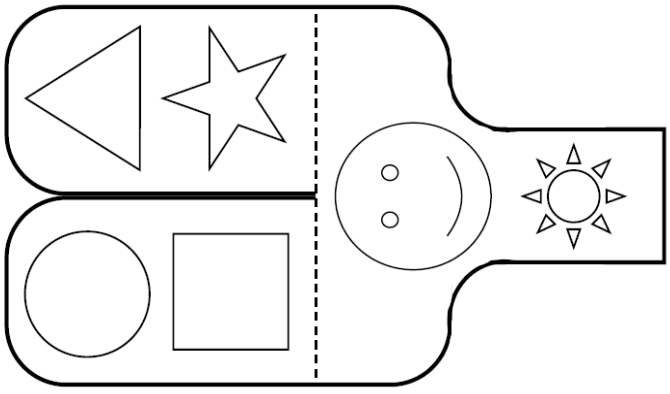



**Game:** Plane Race
**Equipment:** The Joey propeller
**Method:** Line JS up outside the hall and have them start their engines (blow into the above straw propeller) and say “take off” a race around the hall (arms out stretched) with propellers going of course.

**Activity:** Balloon Rotocopter
**Equipment:** I found this Balloon Rotocopter and think it’s a bit hard for the JS to make but I think JS leaders would enjoy making a couple of these and let the JS have a go at flying them. S you will need a couple of Balloon Rotocopters, hair dryers and jars, extension leads.
**Method:** The “Make and fly your very own Balloon Rotocopter is attached

**Game:** Helicopter
**Equipment:** Bean bag on rope
**Method:** JS form a circle, the leader in the middle swings the rope around the circle with the bean bag resting on the ground and the JS jump over it as it comes past.

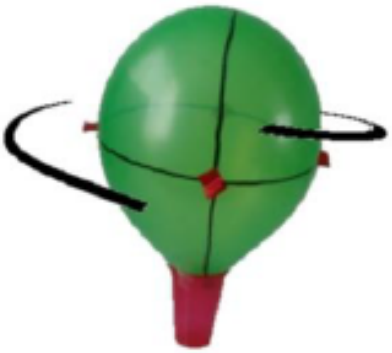
**Spare Craft:** Helicopter
**Equipment:** A cut-out for the JS (Make one with the law or Promise on it), scissors, paperclip
**Method:** Cut out the flyer, fold the wings, attach a paperclip to the base and drop from a height. The helicopter will twirl and slowly float to the ground.



Make and fly your very own

# Balloon Rotocopter

**In this activity, you will construct your very own Rotocopter. You will enjoy this activity more if you follow the instructions carefully, help each other and share materials. Be patient while waiting for your turn so everyone gets a turn. Remember to observe all your usual class safety guidelines.**



## Objectives

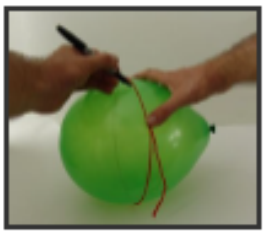
To construct a Balloon Rotocopter
To fly and land your Rotocopter
To investigate how a Rotocopter flies
To work cooperatively and safely

## Making a Balloon Rotocopter

**Materials required**

| | | |
|---|---|---|
| 1 Balloon | String | Sticky Tape |
| 1 Plastic Cup | Scissors | Hair dryer (shared) |

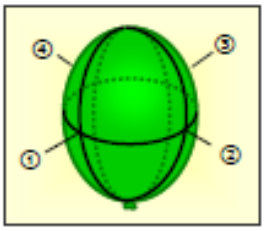
**Procedure**



1. Inflate and tie a balloon.

   Wrap a length of string around the balloon to act as a guide. Use a permanent marker to draw a line around the balloon's circumference.

2. Use the string again or draw a freehand second line right around the balloon. This line should extend from the knot to the 'top' and back again. Draw a third line from the knot to the top and back which intersects the second one at right angles.




3. There should now be four intersections around the balloon's circumference as illustrated. These are the positions you will add sticky tape fins.

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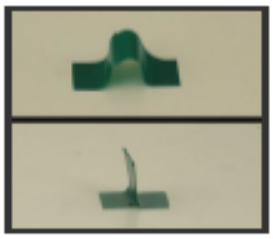
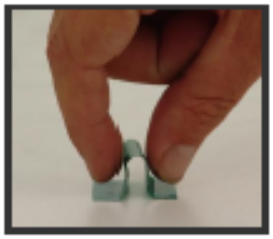


4. Prepare four fins.

   Start with a piece of sticky tape about 4 centimetres long. Stick the ends to a smooth surface as illustrated. Pinching the tape as illustrated below in step 5 completes the fin.



5. Removing adhesive tape can cause balloons to burst! Preparing the adhesive fins on a smooth surface first (eg table) prevents accidental bursts.

   Note: coloured tape was used for the photos but clear Sellotape works just fine too.

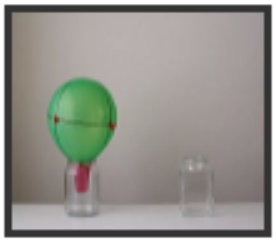
6. Stick one fin on each of the four intersections around the balloon's circumference. Mount each fin at 45 degrees to the circumference as illustrated.

   Note: the fin orientation in this photo makes a Rotocopter that will rotate best in the anti-clockwise direction

7. Your completed Rotocopter should look like this. All four fins should be oriented at the same 45 degree angle.

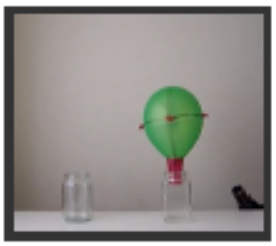
   Your Rotocopter is ready to fly!

## Flying your Rotocopter



Take off

Flight



Landing

1. **Take off**
   Set your Rotocopter on a table or rest it in an empty jar.

2. **Flight**
   Aim a hair dryer at the Rotocopter and switch it on.
   Hold the hair dryer steady while in flight. Move slowly and the Rotocopter will move too.
   Try holding the hair dryer at different angles. What effect does this have?

3. **Landing**
   With practice, you can even land your Rotocopter back in a jar.

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