

45 min

Science
Workshop



**Ages
3-8**

Learn-Through-Play Workshop

This OKIDO downloadable workshop is designed for families and can be easily delivered in the home by YOU. It is designed in collaboration with British Science Association and follows learning to facilitate Early Years and KS1 development using easy-to-find objects from around the home.

This 45 minute learn-through-play workshop includes:

- Watch an episode of Messy goes to OKIDO together
- Discuss the science with easy-to-follow pointers around the subject
- Complete a make-and-do science activity
- Reinforce the learning with a fun, follow-up worksheet

Theme - **Space and the sky**
Subject - **Gravity**

For lots more workshop activities subscribe to OKIDO Magazine at www.okido.com

Watch and learn together

Together with your child, watch this 10-minute episode of Messy goes to OKIDO: 'Moon Landing' episode 1 . [Link to Moon Landing episode on BBC iplayer](#)

(if you are outside UK you can watch on the OKIDO web site: [episode link](#).)

In this episode, Messy Monster accidentally drops his super-stacked-jam-sandwich-snack but wants to know why did it fall down and not up? So off he goes to OKIDO to see if he can get some help.

In this episode Messy and his friends travel up to the moon in a rocket to learn all about **gravity**, how it works and its effect on planet earth.

Talk about the science

Right after watching, ask your child some questions about what they've seen:

- Can you remember where they headed to in their rocket with Pebble?
- Can you remember why they floated in the rocket?
- What happened on the moon where there is *some* gravity?

Now talk to your child about what they've learned:

- Why do things fall down and not travel up?
- If you were in space what might be difficult when there is no gravity?
- Can you pretend that you're on the moon and move accordingly? Try :)

If your child asks a question that you don't know the answer to - just investigate together to find out!

Don't worry - all the information you need to know is explained in the episode :)



New words: Gravity

Now make a gravity-copter

You will need:

- A step ladder (optional)
- Different objects to drop - feathers, socks, tea bags, pens, silky scarf etc
- Card - use a cereal packet or similar if you don't have plain white card at home :)
- Scissors
- Pens and pencils
- Paper clips and / or small bulldog clips

First, experiment by seeing how objects fall differently. Teach your child a **life skill** of climbing safely up a small step ladder using both hands and coming back down facing the same way. Now you go up and drop different objects to see how they fall. If you don't have a step ladder in the home just try to launch things from a height.

- Cut a 'copter' shape from the card - either the Messycopter or Moonlander on the next pages.
- Decorate.
- Fold one 'ear' forward and one backwards.
- Clasp a weight onto the bottom centre.

Now launch the copter from a height and see how it falls.

Experimenting and data collecting

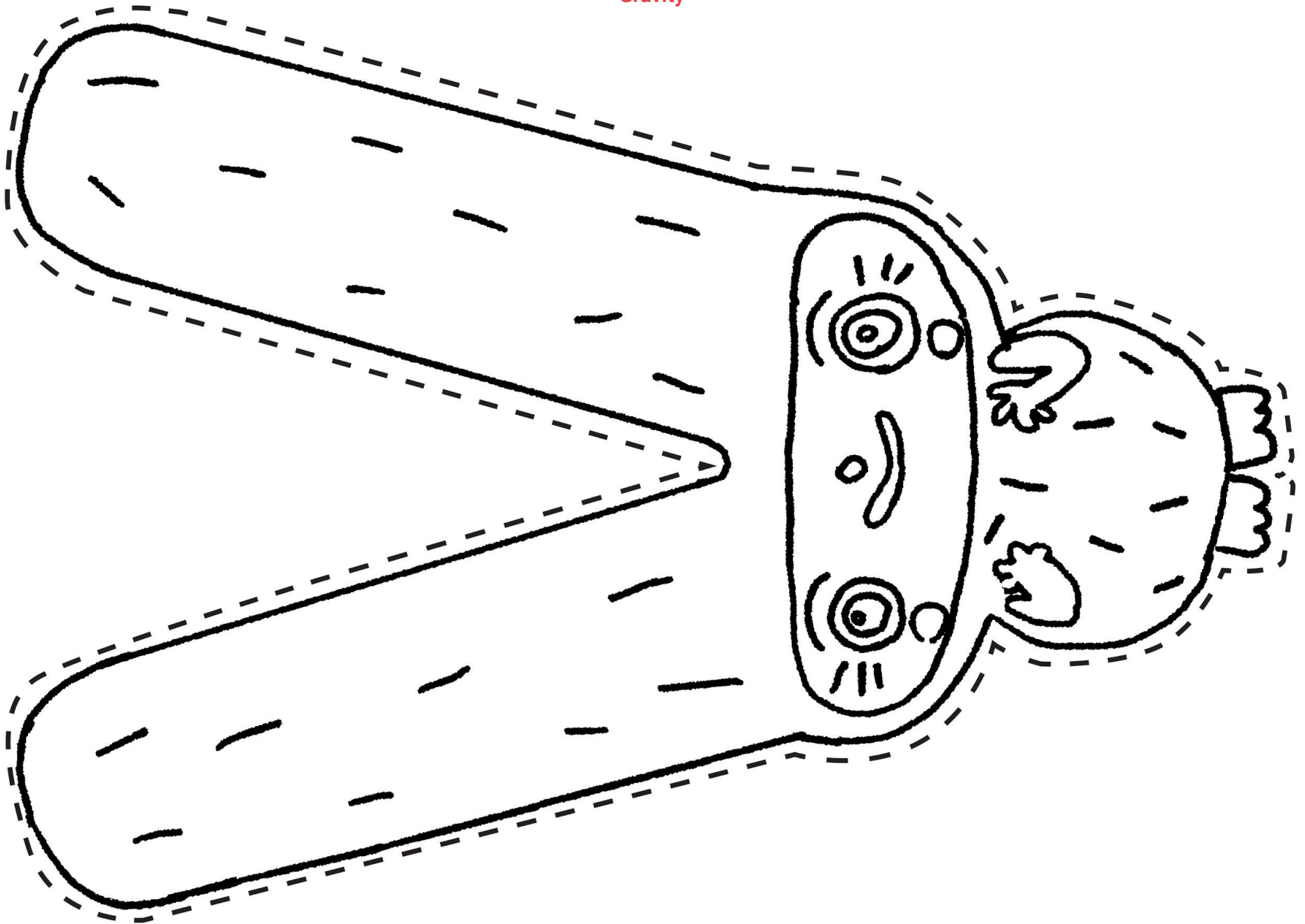
You can experiment with:

- Different weights - add more gradually for each launch to see what a difference it makes. Start with just one paper clip then add more and more, then do the same with bulldog clips or anything that you have that will add weight to the copter - blue tack works well too.
- Different heights - see how the copter falls from launching with your arm in the air, standing on a step or stairs, using the step ladder or safely from the top of a flight of stairs or balcony.

Have your child make a note of how the copter falls differently - which is the optimum / most successful height and weight to launch with?

Why not take your copter to the park? The climbing frame or slide will make a perfect launch pad.

This activity needs to be supervised at all times. Do not let your child climb anything in or around the home unsupervised.





Make a Messy-copter!

1



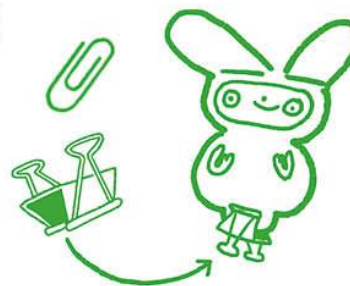
Cut out the Messy-copter along the dashed --- line.

2



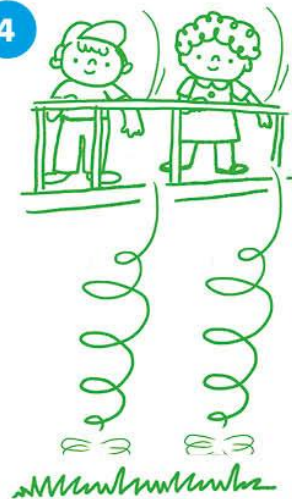
Fold the ears along the dotted line, as shown.

3



Add paper clips or bulldog clips to the bottom of the copter.

4



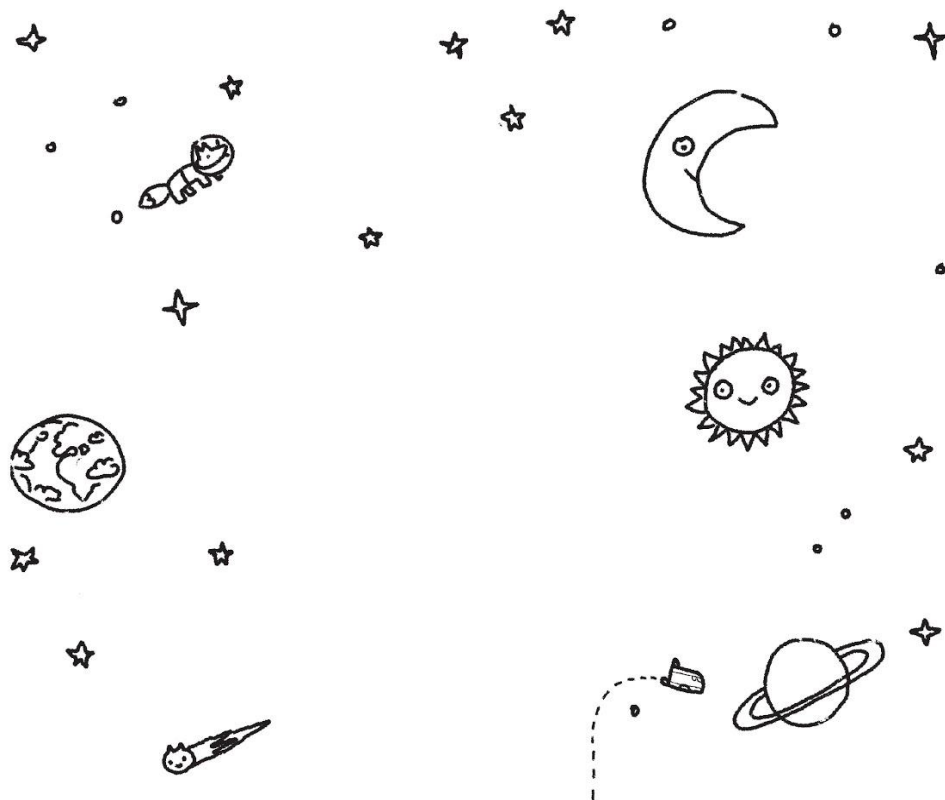
Copter contest!

Drop your copters from a high place or throw into the air. The copter that spins longest in the air WINS!

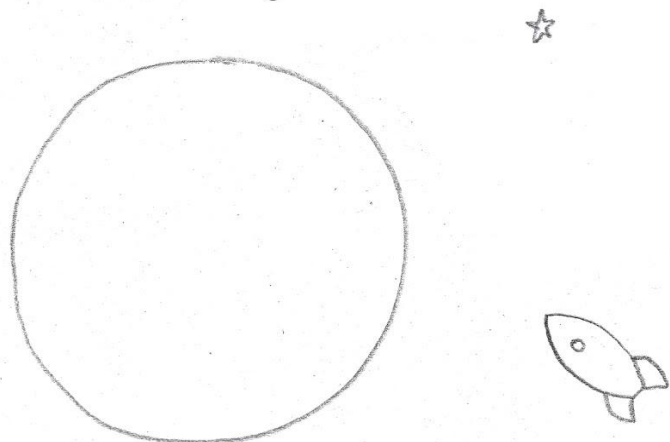
Share your images with us at [#okidoworkshop](https://twitter.com/okidoworkshop)

Let's fly to the moon!

Draw a rocket flying through space!

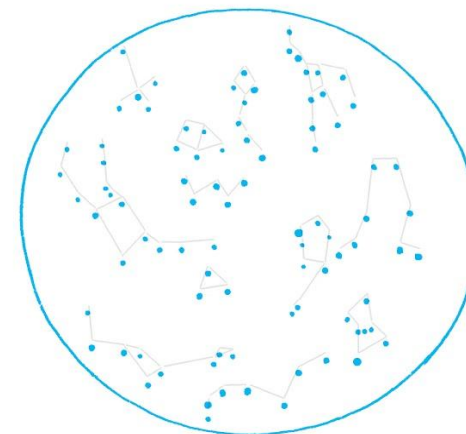


Draw Saturn's ring and fire the rocket!



Join the stars

v



On Earth (1) and in space (2)!

Draw what will happen in space....

