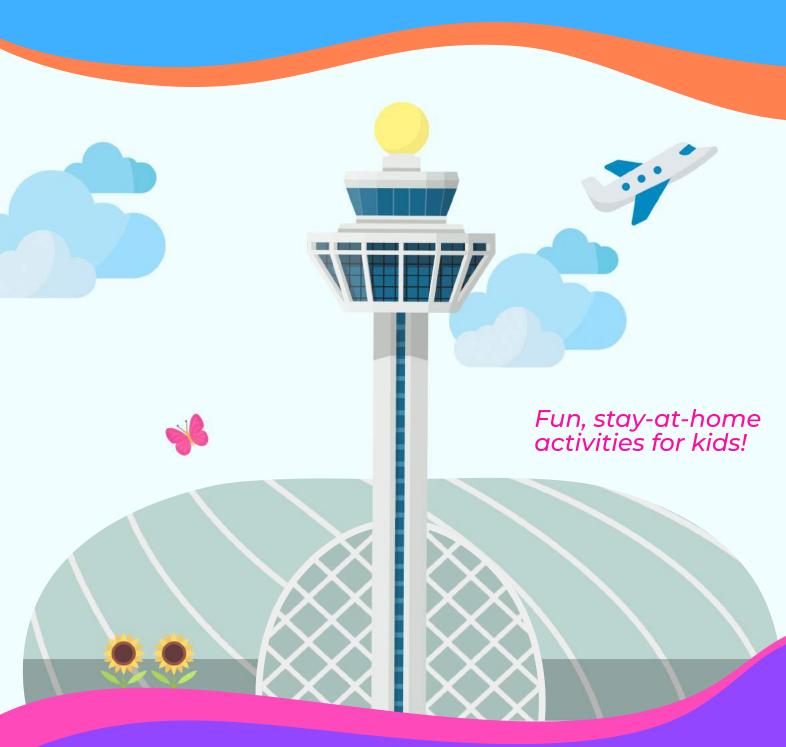
CHANGI KIDS CLUB

Activity Book for the Family



Name

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MAKE YOUR OWN PLANE AT HOME!

Learn about the different parts of an aircraft too



Materials you will need:

Cardboard of an A4 cereal box Straw Tape Scissors Small Heavy Object Paint (Optional)



A STEP BY STEP GUIDE

Head over to https://bit.ly/changidiyplane or scan this QR code for the full instructional video!



Phase 1: Wing/Winglet



1. Cut an A4 piece of cardboard and half it, length wise.



2. For each half of the wing, measure the halfway points of each half and fold into 2 equal parts



3. Bend one side of the cardboard using a long object to give the wings its shape



4. To make the wing's triangular shape, mark out the halfway point of one side of the wing, draw a line to create a triangular shape, and cut it out. Tape to secure.



5. For the winglet, mark out a bend $\frac{1}{3}$ way from the tips, cut the top fold and curve the cardboard upwards. Tape to secure.

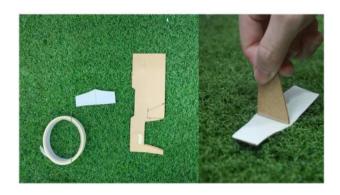


Phase 2: Tail

6. Take the remaining sheet of cardboard and fold a small section into half. Mark and cut out the shape above.



7. Unfold the shape, cut the folded part into half to form the base of the tail. Tape it length-wise to secure.



8. Mark out the top of the tail, ensuring that its length is the same as the base. Attach the top to the base, forming the shape above. Tape to secure.



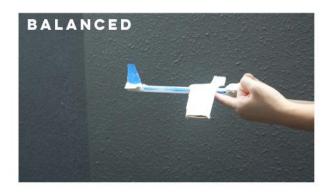


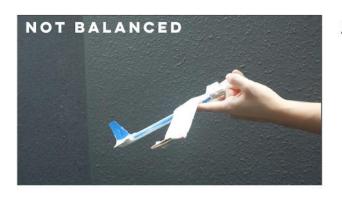


9. Tape the wings together. Attach a straw to the bottom of the wings. Tape the wings 1/3 way from the top. Attach the tail to the lower end of the straw. Secure it tightly with tape.



10. Add small heavy objects to the nose of the plane





11. To check for balance, place index fingers on the innermost parts of the wing. If the plane slants backwards, add more weights.

If plane is balanced/leans forward, you are good to go!



12. (Optional) Paint your plane however you like. Let your imagination roam free!



13. Your plane is ready to take flight!

HOW DO PLANES FLY?

Airplane parts and functions

Winglet Reduces turbulence and stabilizes the airplane

Tail
Provides stability
and keeps the airplane in
the right position

Engine Pushes the airplane forward Nose Allows wind to move around the plane and points the airplane in the right direction

Body To keep it balanced, the weight of the plane is spread from front to back Wing Creates most of the lift to hold the airplane in the air

DIY RAIN VORTEX AT HOME

Make this colourful rain vortex & impress your friends!





Did you know?

Jewel's HSBC Rain Vortex is the world's tallest indoor waterfall at 40 metres high!

Materials you will need:

2 large plastic bottles
Waterproof tape
Hole puncher
Permanent marker
Small plastic container
(optional) food colouring & glitter



A STEP BY STEP GUIDE

Head over to https://bit.ly/changidiyRV or scan this QR code for the full instructional video









2. Place the small plastic container at the mouth of the first bottle. Draw a circle and cut it out



3. Draw a pea-sized circle in the middle and punch it out



4. Place the circle at the mouth of one bottle and tape it up, leaving the hole visible



5. Fill $\frac{3}{4}$ of the second bottle with water (optional: add food colouring and glitter to the water)



6. Secure both bottles together with tape



7. Flip the structure, with the water in the bottle on top, and swirl it. Tada, your rain vortex is complete!



8. Decorate your vortex with materials you can find at home

MAKE YOUR OWN KALEIDOSCOPE

Capture the magic of Jewel through this super easy DIY project!



Did you know?

Jewel's glass dome is made up of 9,000 glass panels and each is unique. No two panels have the same dimensions!



Materials you will need:

2 toilet paper rolls Clear plastic sheet Scrapbook paper Art paper Aluminium foil Beads/ coloured paper Tape/ Washi tape Scissors

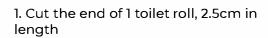


A STEP BY STEP GUIDE

Head over to https://bit.ly/jewelscope or scan this QR code for the full instructional video





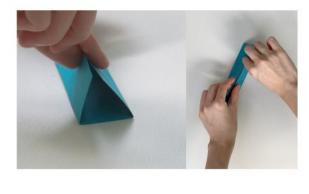




2. Attach the 2 longer toilet rolls together using tape to create your cardboard tube



3. Cut out a rectangle, with its length slightly smaller than the tube. (10.2cm x 15.2cm)



4. Draw and fold 2 lines down the rectangular cut out, each line 3.4cm in width



5. Paste aluminium foil (shiny side up) onto rectangular cut out and tape into a trianglular shape



6. Slide triangle into cardboard tube



7. Trace 2 circles using plastic sheet and cut them out. Place first plastic circle inside cardboard tube



8. With the small 2.5cm toilet roll, fold it over itself and secure with tape. Place second plastic circle over it and secure with tape. Add beads/ coloured paper.



9. Trace and cut out a circle with leftover art paper. Cut out hole in the middle and tape it to the other end of cardboard tube



10. And it's done! Experience Jewel like never before with your homemade kaleidoscope.

SPACEMAN

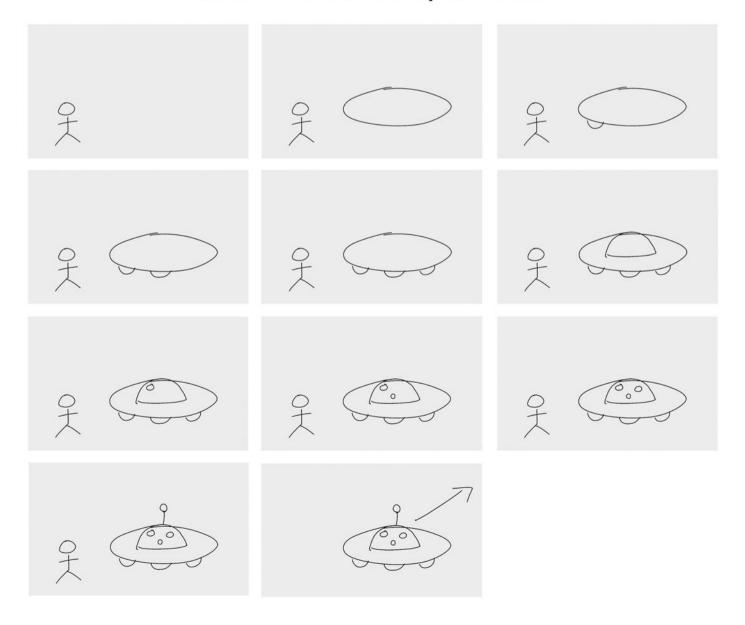
Guess the word before the spaceman is drawn!

Instructions

- 1. One person will pick a word from the next page and tell the other person how many letters it has.
- 2. The other person has to guess what the word is by guessing one letter at a time.
- 2. Draw one stroke of the spaceman on a whiteboard or paper everytime a wrong letter is chosen!

Clue: They can all be found in Changi Airport!

How to draw the Spaceman



SPACEMAN

Guessing words

Flying

Aeroplane (9 letters)

Air Stewardess (3 and 10 letters)

Carpark (7 letters)

Luggage (7 letters)

Pilot (5 letters)

Runway (6 letters)

Flowers

Bougainvillea (13 letters)

Cactus (6 letters)

Daisy (5 letters)

Garden (6 letters)

Lily (4 letters)

Orchid (6 letters)

Changi

Jewel (5 letters) Skytrain (8 letters)

Maze (4 letters) Slide (5 letters)

Playground (10 letters) Supermarket (11 letters)

Restaurant (10 letters) Trolley (7 letters)

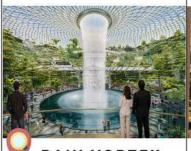
CHANGI ATTRACTIONS MEMORY GAME

A game for the whole family!



- Mix up the cards.
- 2 Lay them in rows, face down.
- 3 Turn over any two cards.
- If the two cards match, keep them.
- If they don't match, turn them back over and your turn is over.
- Try to remember the images on each card and where it is placed.
- The game is over when all the cards have been matched.
- The winner is the one who has matched the most card pairs.
- Have fun with your family. Let's see who wins the most number of times!





RAIN VORTEX

500,000 litres of water is used for the waterfall, with 38,000 litres of it falling through the oculus each minute. When it's raining, rainwater falls through as a part of it as well.



PALUDARIUM

The paludarium in T1 is a tropical rainforest which measures nearly 5m long and is made up of 60 species of flora and fauna from Asia and South America's tropical rainforests!



KINETIC RAIN

Kinetic rain comprises 1,216 copper-plated aluminium droplets which weigh 180g each. Each shape represents the movement of flight through deliberate, fluid movements.



NFLOWER GARDEN

Did you know that the bud of the sunflower faces the sun at all times throughout the day, starting the day facing east and ending it facing west?



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A MILLION TIMES

A Million Times at Changi is a kinetic sculpture & clock. Its hands move from unpredictable, mechanical spinning to a series of perfectly synchronised designs & patterns.



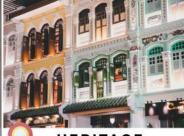
BUTTERFLY GARDEN

Look carefully the next time you're here because the garden features more than 1,000 butterflies from 30 - 40 species!



SINGAPORE MURALS Singapore Rojak is a 37m long

mural featuring a nostalgic street lined with stalls selling mouth-watering local delicacies, highlighting the flavour of Singapore's culture.



HERITAGE ZONE

On the central shophouse façade, a six-minute theatrical performance is screened at intervals, giving travellers a glimpse of life in 1930s Singapore.



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CHANGI'S LITTLE HELPERS

Transform your paper bag into a high visibility safety vest used in Changi Airport!



Materials you will need:
Paper Bag
Markers
Scissors
Paint (Green, Yellow, Black)
Paint Palette
Paintbrush
Double Sided Tape

Did you know?

Our staff are required to put on high visibility safety vests when they work to ensure their safety. This ensures that big moving vehicles on the airside area can spot them from afar to prevent accidents from happening.

A STEP BY STEP GUIDE

Head over to bit.ly/DIYSafetyVest or scan this QR code for the full instructional video







1. Find a paper bag that matches the size of your body!



2. Cut the handles off.



3. Lay the side of the paper bag which has an opening downwards.



Sketch a V-neck tank top on the paper bag.



5. Cut up the seam in the middle all the wayto your neckline and keep going along your sketch.



7. For the side of the vest, go back to where you sketched the arm holes. Follow your sketch and cut through the sketch lines.



9. Mix the green and yellow paint together.
Paint it!



11. Paint black stripes along the corners of your vest.



6. When you get to the back of the vest, cut a v-neck.



8. Turn your vest inside out.



10. Secure the double sided tape to your vest.



12. Play dress up! You are all ready for your career at Changi!

CHANGI'S LITTLE HELPERS

Let your imagination run free!

If you ever wanted to work at Changi, here's how you can create your own high visibility safety vest at home.

- 1) Follow the series of DIY Safety vest instructions.
- 2) Cut out the logo that matches the job role of your choice and paste it at the back of your vest
- 3) Put your safety vest on and you're ready to work!

4)Pick a job/occupation below and have fun roleplaying! Try roleplaying as one of the Changi workers and act out scenes that could happen at the airport.





I am from the Apron services team. I load and unload your baggage, cargo and mail. I also help to dock passenger loading bridges to make sure travellers can disembark the aircraft safely.



I am from the Airport Emergency Service Team. Time is of the essence in this job.

If there is an accident, I have to reach the site in only 2 minutes! I rescue those in danger, put out fires and help to manage crash sites.





I work at dnata Operations. Every morning, I ensure we have enough staff for the first flight. I check that all tractors, ramps and baggage trolleys are ready for flights taking off / landing.



I am an auxiliary police officer. I'm responsible for traffic enforcement at the departure kerb side. I look for unattended bags and vehicles as part of security operations.