

STATIC BUTTERFLY

LEARN
bydesign

STEM
@HOME

You will need:



THICK
CARD



COLOURED
PAPER/CARD



TISSUE
PAPER



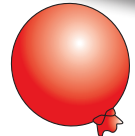
GLUE STICK



SCISSORS

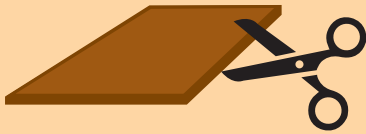


GOOGLY EYES

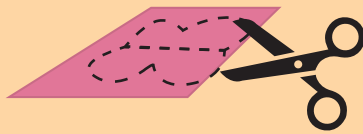


BALLOON

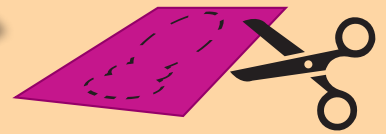
Method:



Cut the thick card in to squares.
Recommended size, 7"(18cm)



Cut out a set of butterfly wings
from the tissue paper and lay it
on the square.

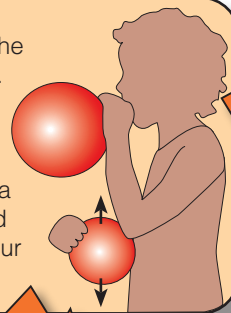


Use the coloured card to cut out a
body for your butterfly. This needs
to be longer than the wings.

Share your results
on social media
#LEARNBYDESIGN
@BYDESIGNGROUP
#STEMATHOME1BD

Blow up the
balloon.

Tie with a
knot and
rub on your
tummy.

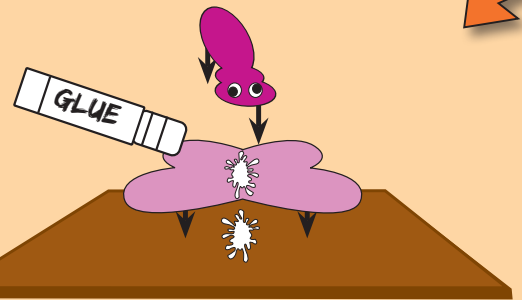


WHY DID
THE WINGS
MOVE?

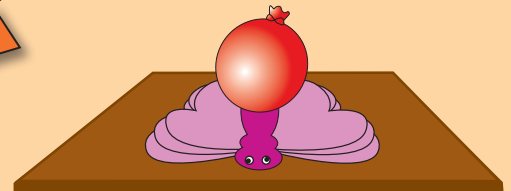
STATIC ELECTRICITY
OCCURS WHEN CHARGE
BUILDS UP IN ONE
PLACE.

OBJECTS TYPICALLY
HAVE AN OVERALL CHARGE
OF ZERO SO ACCUMULATING
A CHARGE REQUIRES THE
TRANSFER OF ELECTRONS
FROM ONE OBJECT TO
ANOTHER.

THERE ARE
SEVERAL WAYS TO TRANSFER
ELECTRONS AND THUS BUILD
UP A CHARGE FRICTION
THE TRIBOELECTRIC EFFECT
CONDUCTION
AND INDUCTION.



Glue the body of your butterfly to the cardboard,
over the wings. But be very careful not to glue the
wings down as they won't be able to fly.
Add the googly eyes and decorate!



Hold the balloon near to the butterfly and
the wings will lift. If you move away a little
bit the wings will go back down, and it will
look like your butterfly is flying.

HAVE FUN WITH STEM AT HOME

PLEASE ASK PERMISSION FROM THE HOUSEOWNER BEFORE TAKING PART IN ANY EXPERIMENT AND ASK FOR ADULT SUPERVISION WHERE REQUIRED