

CHALLENGE 1:
IDENTIFY THESE ICONS.

CHALLENGE 2:
CHOOSE ONE ICON AND
EXPLAIN WHAT ITS LOGO
REPRESENTS.

CHALLENGE 3:
CHOOSE AN APP AND
CREATE YOUR OWN ICON
FOR IT!



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TECHNOLOGY CHALLENGE!





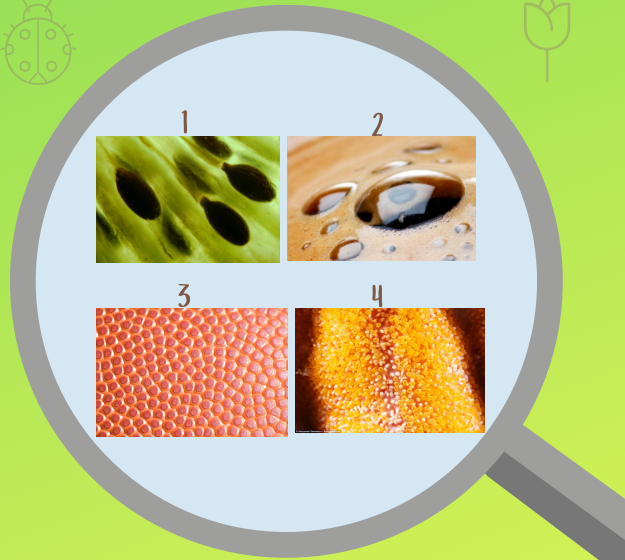
LOOK CLOSELY!

CHALLENGE 1:

CAN YOU IDENTIFY THESE MAGNIFIED
IMAGES? EXPLAIN YOUR GUESS.

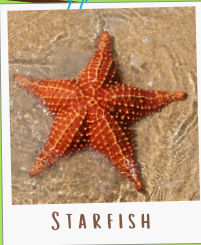
CHALLENGE 2:

CAN YOU TAKE YOUR OWN CLOSE UP
PICTURE, ZOOMING IN AS IF IT IS
UNDER A MICROSCOPE? SHARE IT WITH
US TO SEE IF WE CAN GUESS!



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SCIENTIFIC CHALLENGE!





STARFISH



CHICKEN



SNAKE

ODD ONE OUT!

LOOK AT THE IMAGES AND TRY TO IDENTIFY WHICH ONE IS THE
ODD ONE OUT. DON'T FORGET TO EXPLAIN WHY YOU HAVE
CHOSEN IT!

THINK ABOUT...

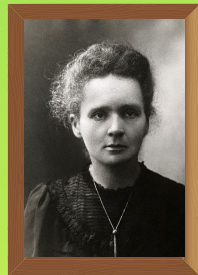
- WHERE THEY LIVE
- THEIR PHYSICAL FEATURES AND CHARACTERISTICS
- WHAT THEY EAT
- ANYTHING ELSE YOU CAN THINK OF!



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SCIENTIFIC CHALLENGE!



SCIENTIFIC HALL OF FAME!



CAN YOU NAME THE FAMOUS SCIENTISTS?

TALK ABOUT THEIR DISCOVERIES, WHY THEY ARE FAMOUS AND ANY OTHER INTERESTING FACTS YOU KNOW OF OR FIND OUT!

IS THERE A FAMOUS SCIENTIST THAT INSPIRES YOU?

WHO IS IT, WHAT DID THEY DO AND WHY DO THEY INSPIRE YOU?



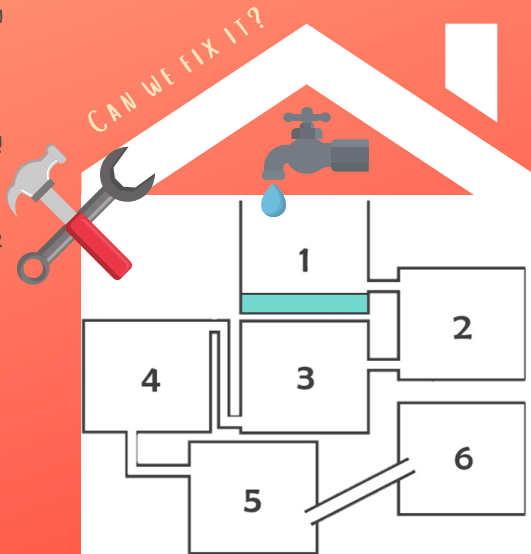
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SCIENTIFIC CHALLENGE!



DURING LOCKDOWN YOU
HAVE NOTICED THAT A
PIPE HAS BURST AND IT
HAS STARTED TO LEAK
INTO DIFFERENT ROOMS!

1. WHICH ROOM WILL
FILL UP WITH WATER
FIRST?
2. CHOOSE THE BEST
MATERIAL TO STOP
THE LEAK. EXPLAIN
WHY YOU HAVE
CHOSEN IT.
 - SPONGE
 - RUBBER
 - WOOD

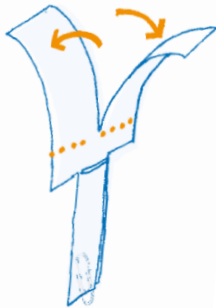
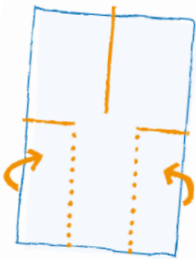


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ENGINEERING CHALLENGE!





CAN YOU DESIGN AND CREATE YOUR OWN PAPER HELICOPTER?



YOU WILL NEED:

- A SHEET OF PAPER
- PAPER CLIPS
- SCISSORS

1. TAKE A PIECE OF PAPER AND MAKE THREE CUTS AS SHOWN IN THE ILLUSTRATION. THEN FOLD THE PAPER IN ON ITSELF AT THE BOTTOM HALF – USE A PAPER CLIP TO KEEP THE SIDES TOGETHER.
2. FOLD THE TWO HALVES OF THE REMAINING PAPER AWAY FROM EACH OTHER, TO FORM THE HELICOPTER BLADES.
3. STAND CAREFULLY ON A CHAIR AND DROP YOUR HELICOPTER, MAKING SURE IT STAYS UPRIGHT AS YOU LET GO!



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ENGINEERING CHALLENGE!



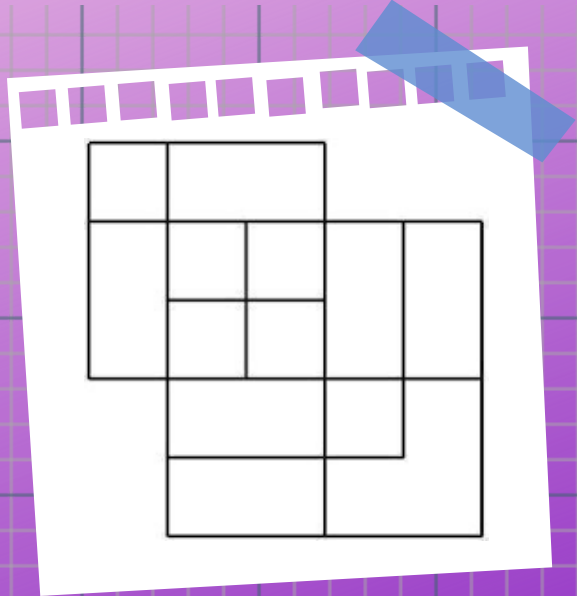


LOOK CLOSELY...

HOW MANY SQUARES CAN YOU
SEE IN THE PUZZLE?

TOP TIPS!

- ONLY COUNT THE SQUARES
- THERE MAY BE A SQUARE
WITHIN A SQUARE!



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MATHS CHALLENGE!





TARGET NUMBER

CAN YOU GET TO THE TARGET USING THE
NUMBERS BELOW?

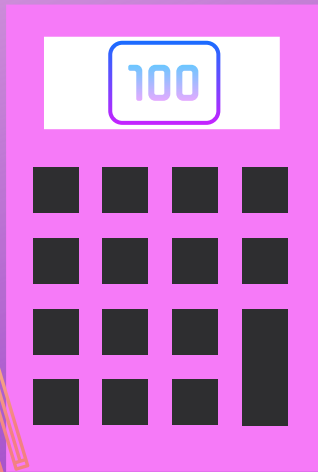
50

25

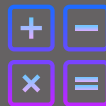
3

2


YOU CAN USE THESE TO GET TO THE TARGET!



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MATHS CHALLENGE!



HERE IS A MADE UP CODE FROM A WEBSITE. IT CHECKS IF SOMEONE IS ENTERING THE CORRECT PASSWORD, BEFORE LETTING THEM LOGIN. THE PROBLEM IS, THE DEVELOPER THAT WROTE THIS CODE MADE IT SUPER EASY TO TELL WHAT THE CORRECT PASSWORD IS. CAN YOU FIND THE PASSWORD IN THE CODE?



```
variable LoginForm      = new Form()
variable AcceptedPassword = "5ecr3t123"
variable SubmittedPassword = LoginForm.PasswordField

when [ LoginForm is Submitted() ] do
  if [ SubmittedPassword == AcceptedPassword ] then
    ShowMessage "You have logged in successfully"
    LoadSecurePage()
  otherwise
    ShowMessage "Incorrect password entered"
    LoginForm.ResetForm()
  end
end
done
```



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TECHNOLOGY CHALLENGE!

