

Thinking Skills and Creative Thinking

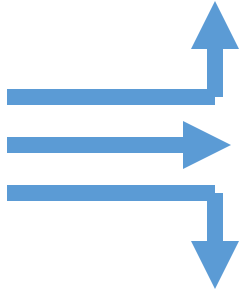
Shirley Pulis Xerxen

The Edward de Bono Institute
for the Design and Development of Thinking,
University of Malta



UNIVERSITY OF MALTA

The Edward de Bono Institute for the
Design and Development of Thinking



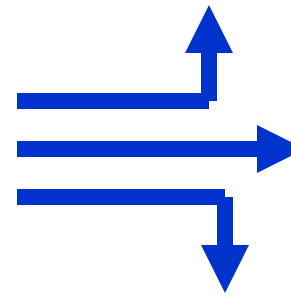
P.M.I.

PLUS MINUS INTERESTING

- This tool helps us to look at **ALL** the aspects of a subject or problem before making a decision.
- We use the P.M.I. tool when making a choice, designing a project...



P.M.I.



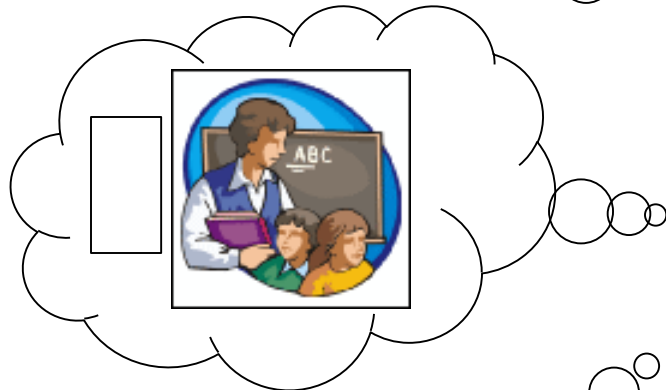
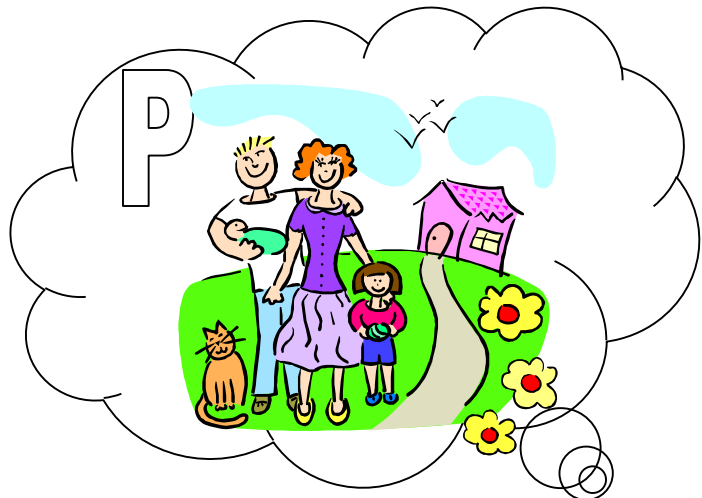
- **Plus** First, find all the Plus, positive points.
- **Minus** Then find all the Minus, negative points.
- **Interesting** Finally, look for the interesting points. Ask questions, think of solutions, present ideas that tackle the minus points

Design

choice

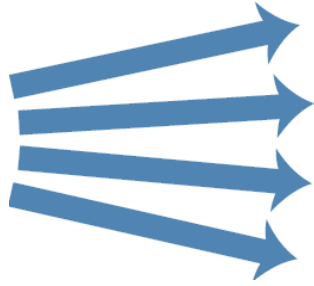
Assessment





P.M.I.
No more school!





A.P.C.

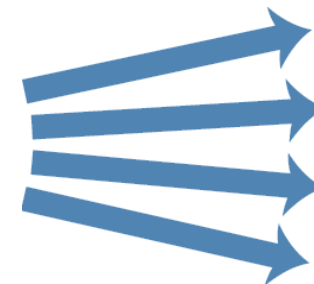
ALTERNATIVES POSSIBILITIES CHOICES

- This tool helps us to look at **ALL** the possibilities when making decisions or taking action or looking for different explanations.



APC Alternatives Possibilities Choices

- When you have to make a decision or take action, you may at first think that you do not have all the choices at your disposal. But if you look for them you may find that there are more alternatives than you thought.

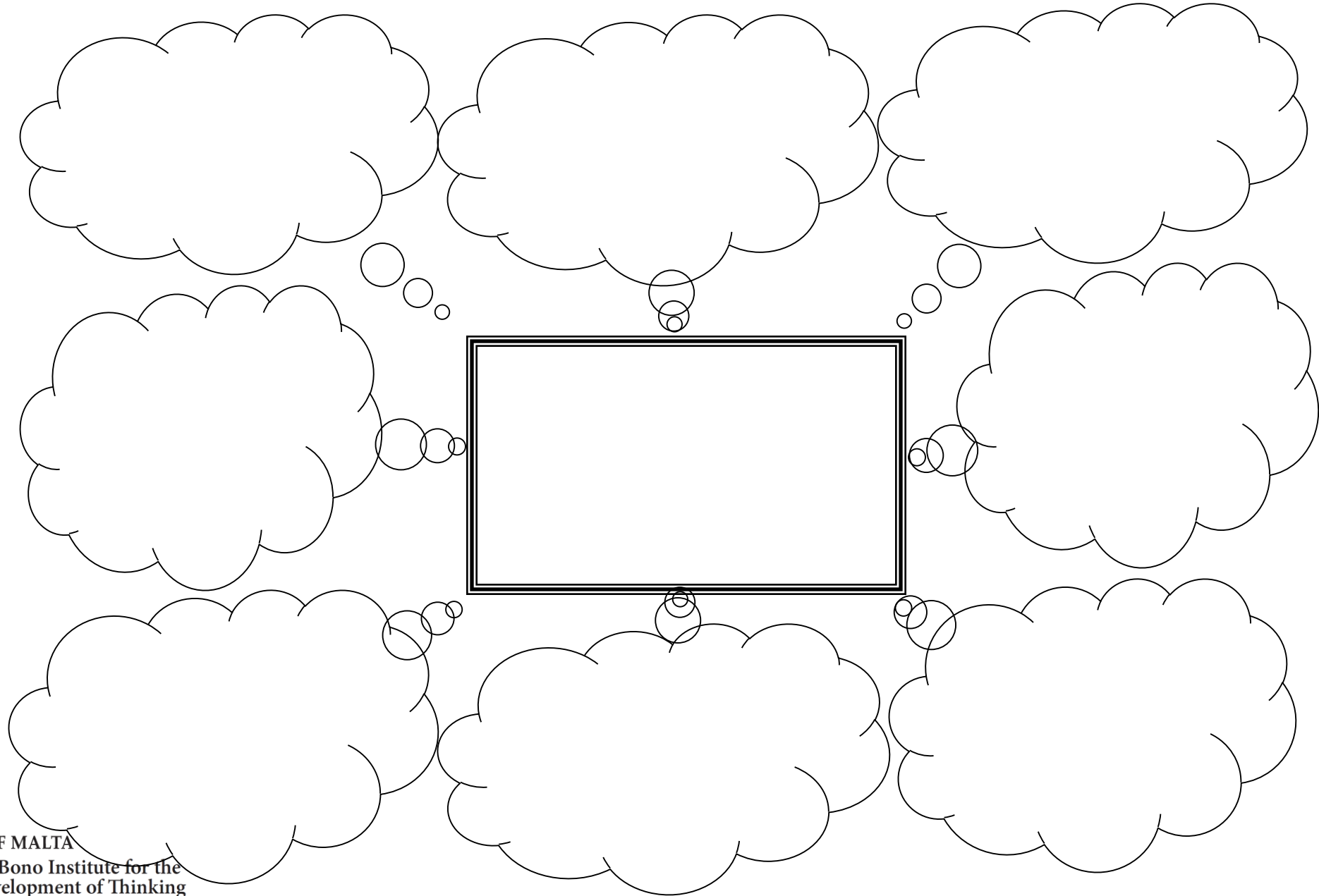


What are you
doing during
the Christmas
Holidays?

Let's
Let's do an
A.P.C.

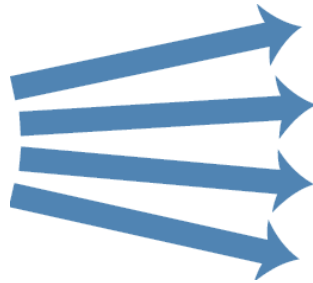


A.P.C. Alternatives, Possibilities, Choices



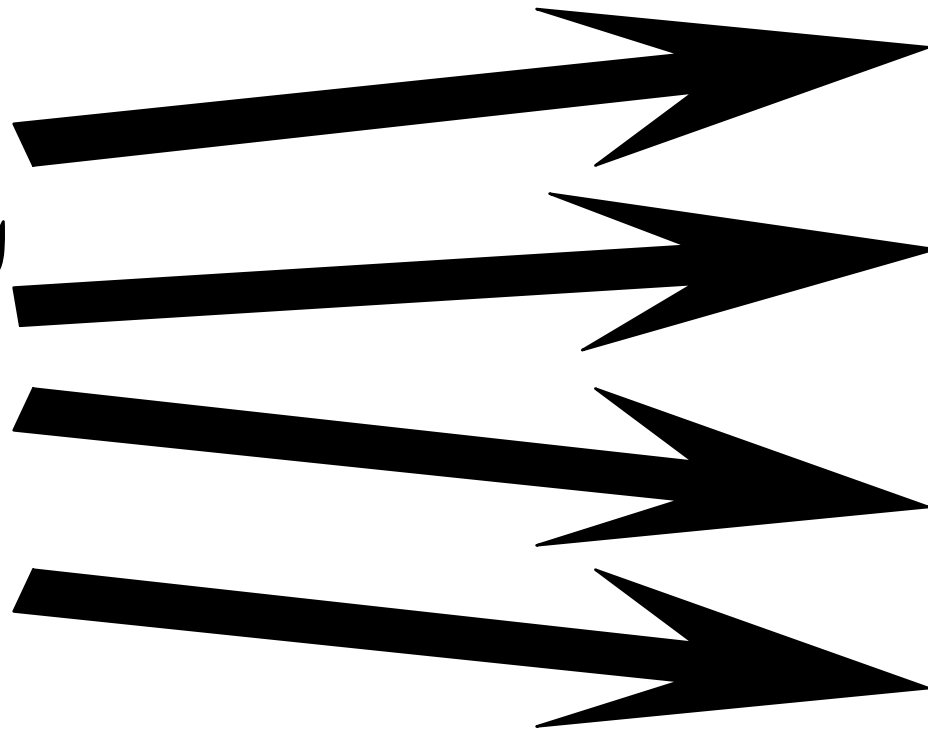
Want to try it out?

- A man goes into a bar and asks for a drink of water. The woman behind the bar gives him a drink of water and then suddenly screams. What possible explanations are there?

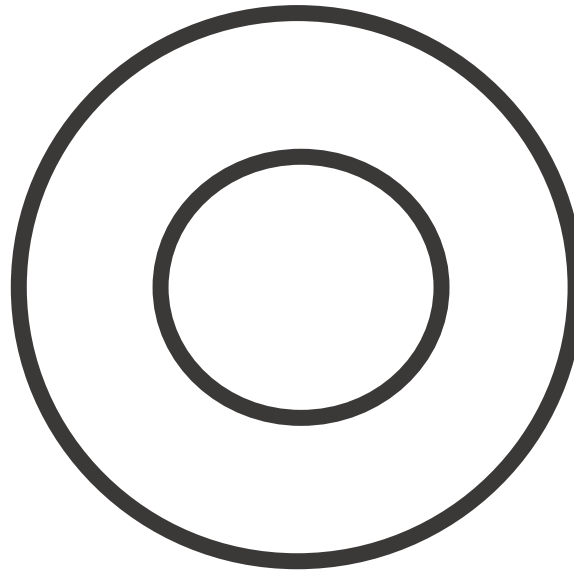


What else?

A.P.C.



What is this?



Suggestions

window

ball

lazy river tyre

ball inside a hole

omelette

pool

clock

long play

athletics track

doughnut with jam filling

doughnut with a hole in middle

wall-hanging decorative plate

apple with a hole left by a worm

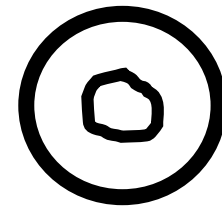
a huge water park pool

the shell of an egg after it hatched

blackhole in space

hole in a nose

plate with a cupcake in the middle



Suggestions

pool slide seen from the inside

bird's egg in a nest

marble with a circular design

billiards ball

frisbee

hole in the ear

pond

egg in a pan

bowl for animal feed

doughnut with a chocolate centre

cookie

bagel

tyre

tadpole's egg

mirror

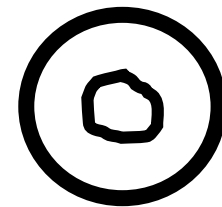
merry-go-round

polo mint

plate

cd

button



UNIVERSITY OF MALTA

The Edward de Bono Institute for the
Design and Development of Thinking

Suggestions

bowl

mouse's hole

hat

aerial view of a volcano

plant pot

bead

manhole

bowl

water fountain

sink hole

roundabout

pacifier

sliced olive

special type of orange

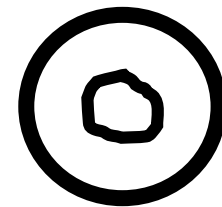
shield

pillow

ceiling fan at high speed

kiwi cut in half

belly button

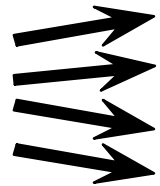


eye

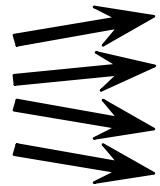


What happened?

- A girl goes for a holiday on the mountains with her family. On a bright sunny day she goes out for a walk and in a field she sees a carrot and two pieces of coal. What explanation did she find for it?



Can you improve it?



Becoming a better you



O.P.V.

Other People's Views



Other People's Views

- The O.P.V. tool helps you to be able to tell how other people are thinking.
- One of the principles of this tool is that you should see the other person's point of view whether you agree with it or not.

O.P.V.

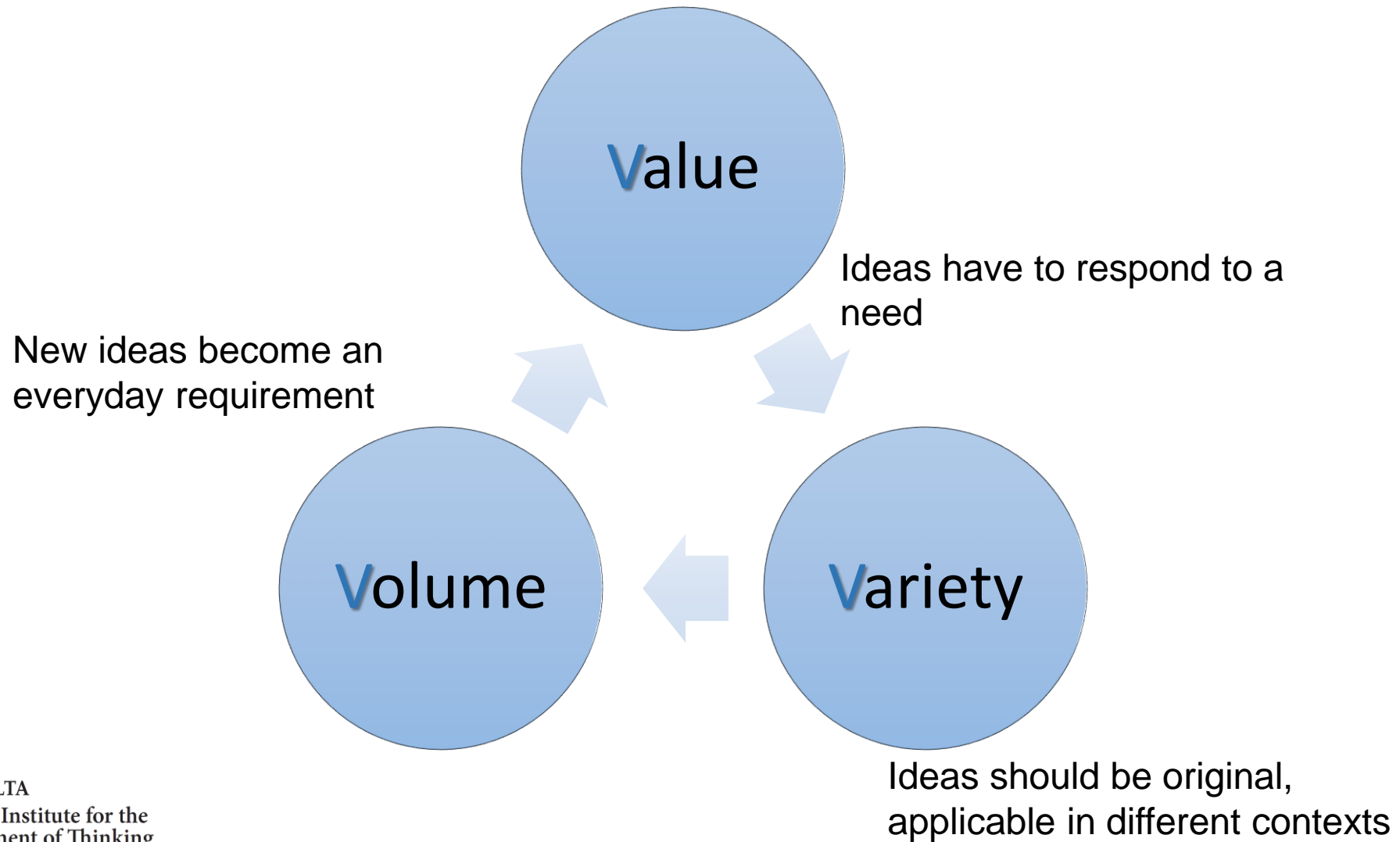


Other People's Views

- Many thinking situations involve other people, possibly looking at things differently even if the situation is similar.
- First, make a list of all the people involved.
- Then tackle each one on the list – put yourself in that person or group's shoes.



The 3 V's of cr3ativity (Pulis Xerxen, 2013)



Starbursting

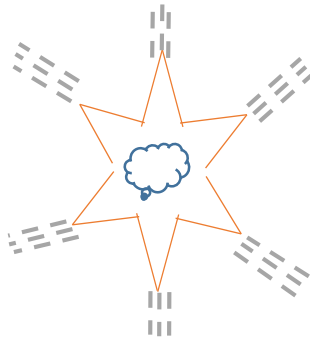
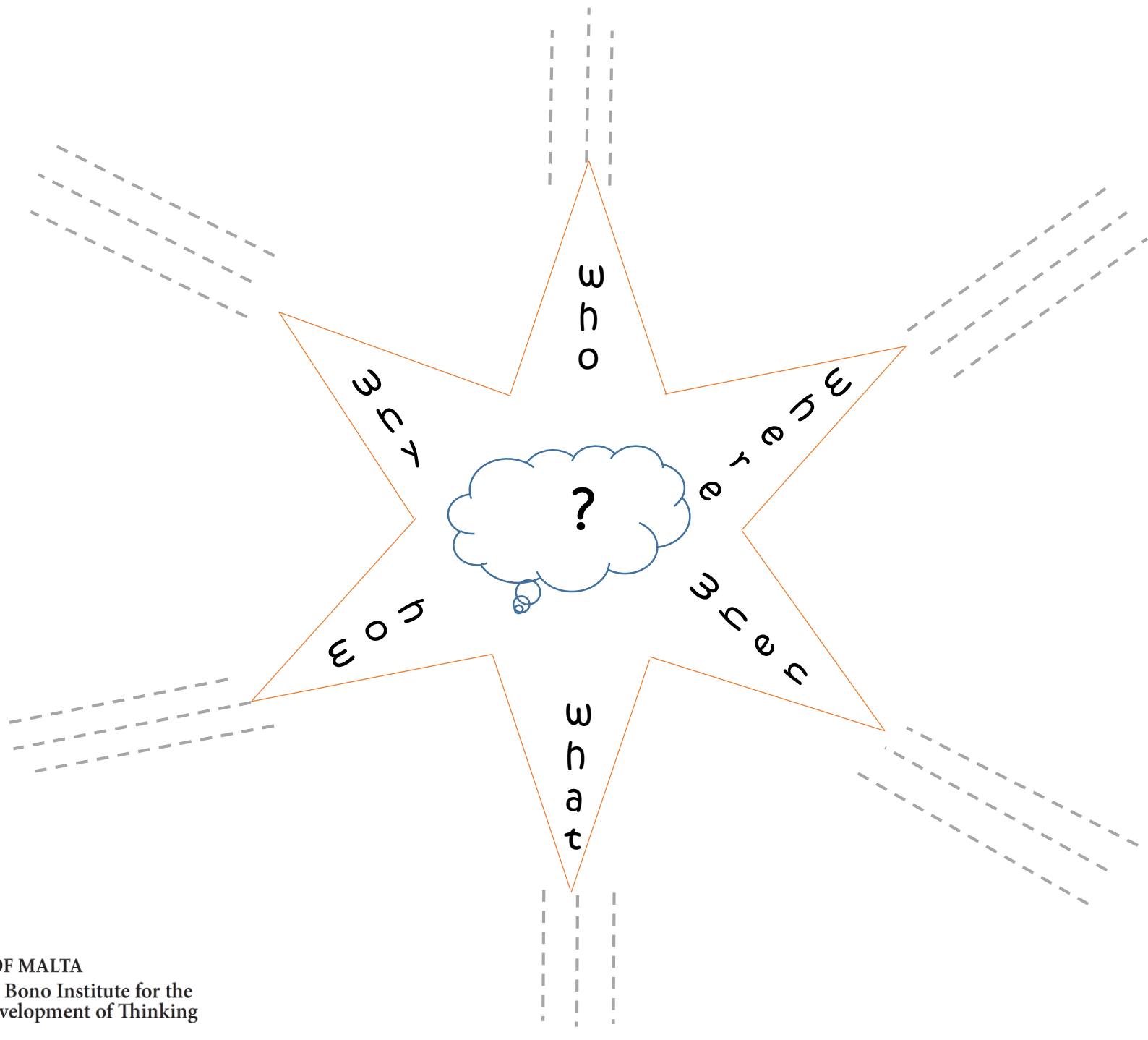
More details of this tool can be found on mindtools.com



Starbursting

- Starbursting is a form of brainstorming that focuses on generating questions rather than answers.
- For example, a friend suggests starting a small business together.
 - One question you ask might be “What will we be selling?”
- But you need to go further than this to ensure that your thinking is complete:
 - “How can I start a business?”, “Who has the expertise to help me with starting a business?”





Using Starbursting

- **Step 1**

Take a large sheet of paper, draw a large six-pointed star in the middle, and write your idea, product or challenge in the centre.

- **Step 2**

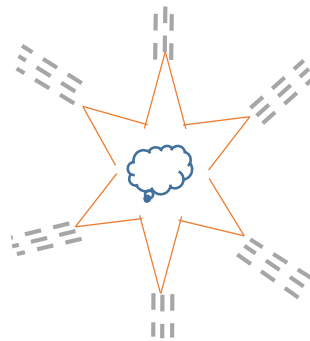
Write the words Who, What, Why, Where, When and How at the tip of each point of the star.

- **Step 3**

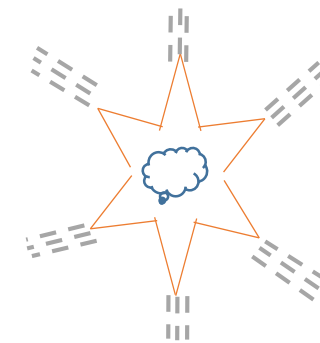
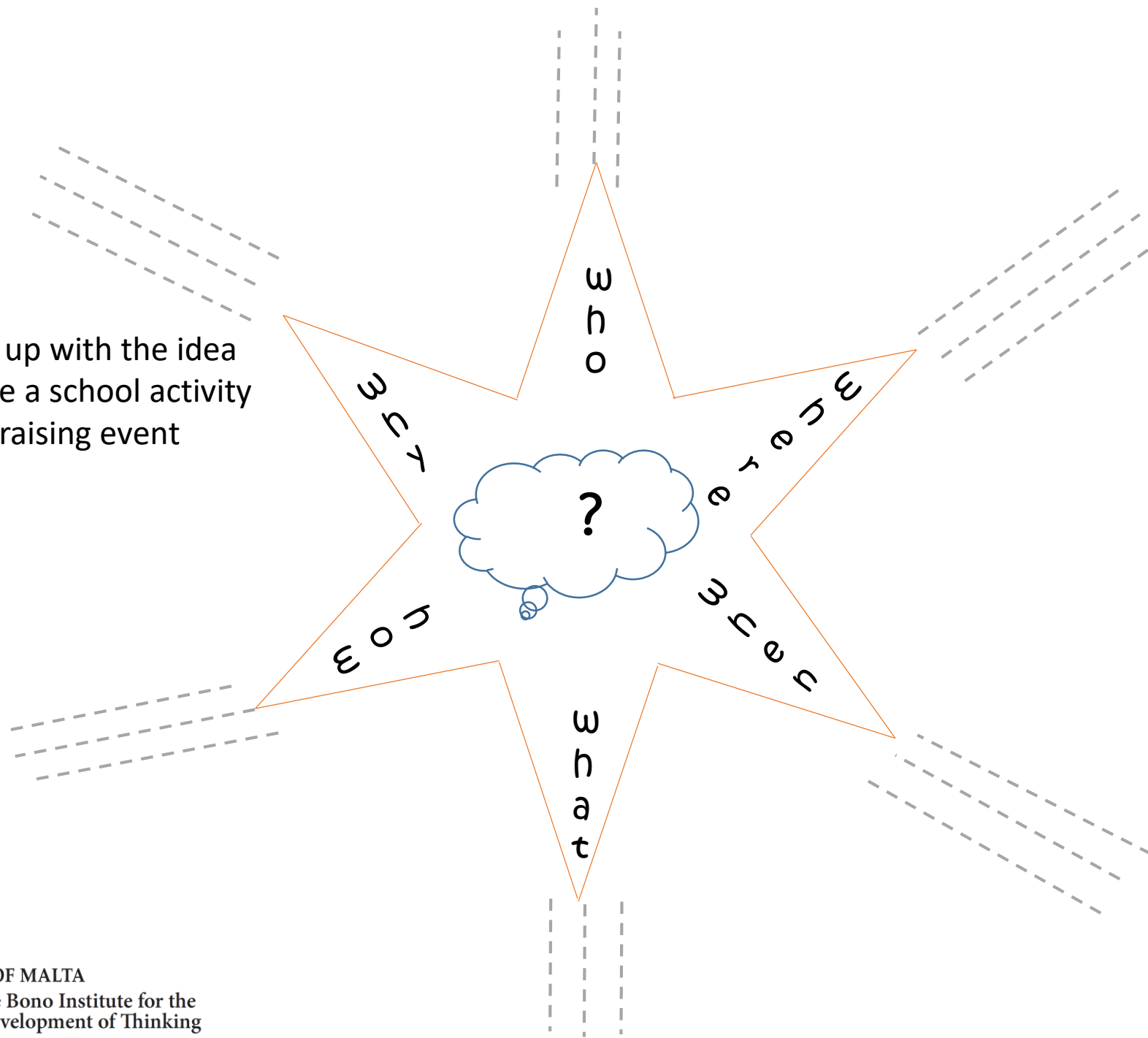
Brainstorm questions about the idea, problem or challenge starting with each of these words. The questions radiate out from the central star. Don't try to answer any of the questions as you go along. Instead, concentrate on thinking up as many questions as you can.

- **Step 4**

Depending on the scope of the exercise, you may want to have further starbursting sessions to explore the answers to these initial questions further.



You come up with the idea
to organize a school activity
as a fund-raising event



Starbursting

- In what situations can you use this tool?
 - At school
 - At home
 - With friends



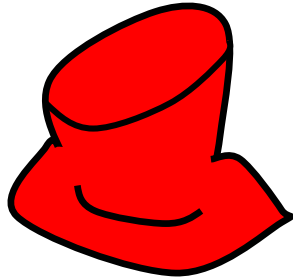
Edward de Bono's

Six Thinking Hats

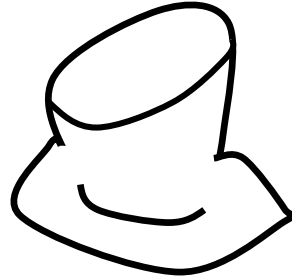
An aid to decision making and problem solving.



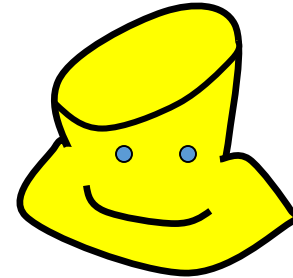
Six Thinking Hats



Intuitive

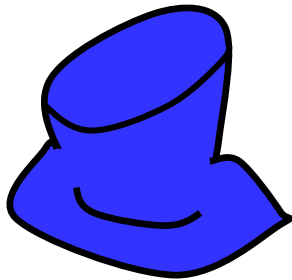


Informative

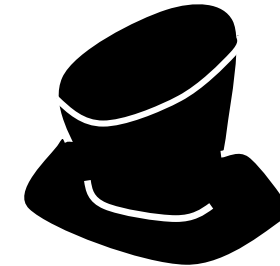
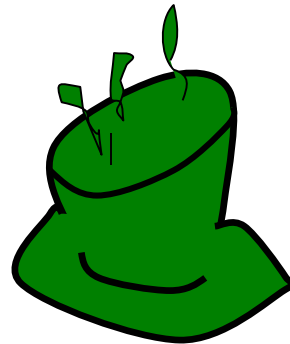


Constructive

Reflective

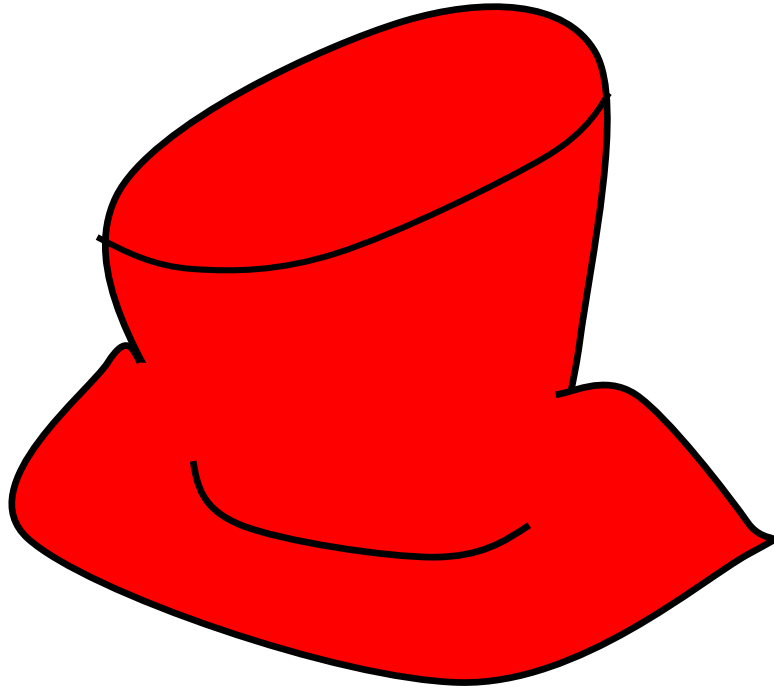


Creative



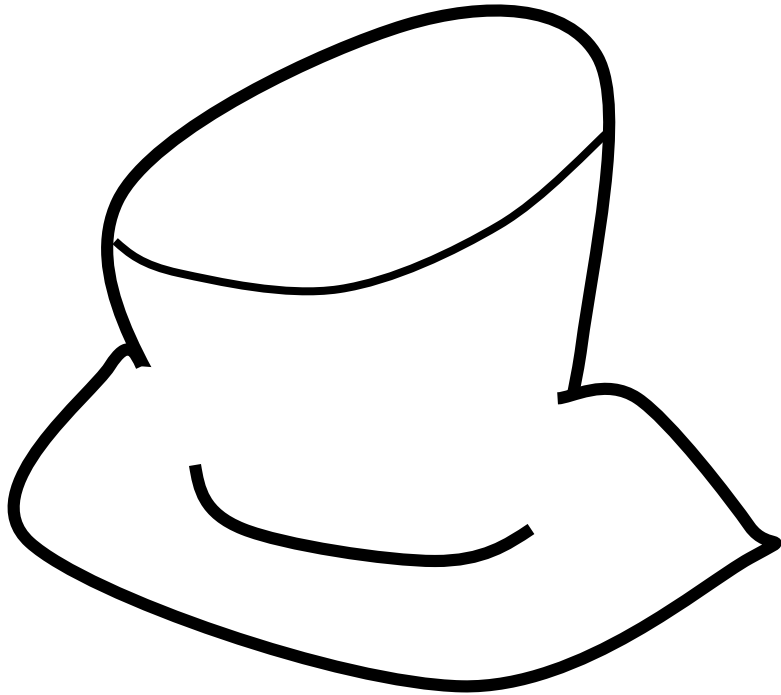
Cautious

The Red Hat



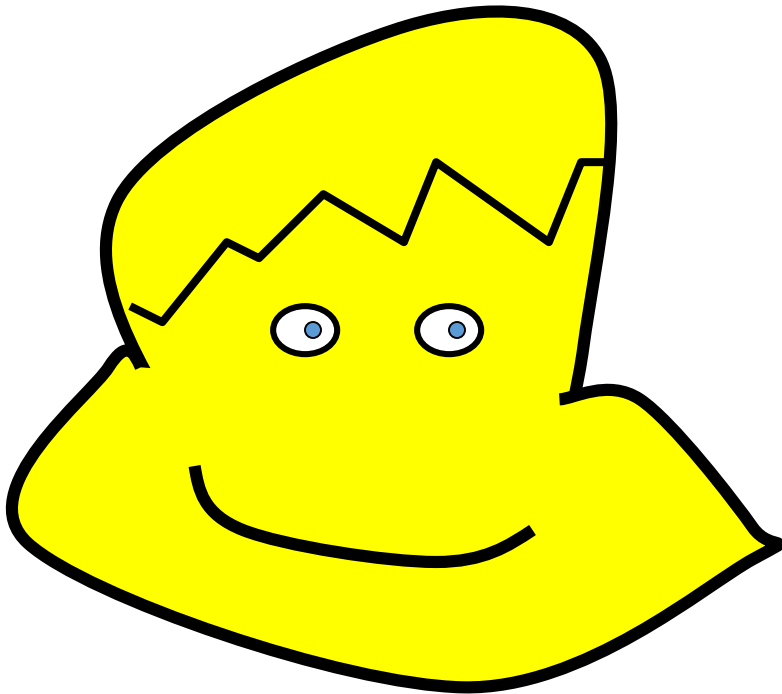
- What do you feel about the suggestion?
- What are your gut reactions?
- What intuitions do you have?
- Don't think too long or too hard.

The White Hat



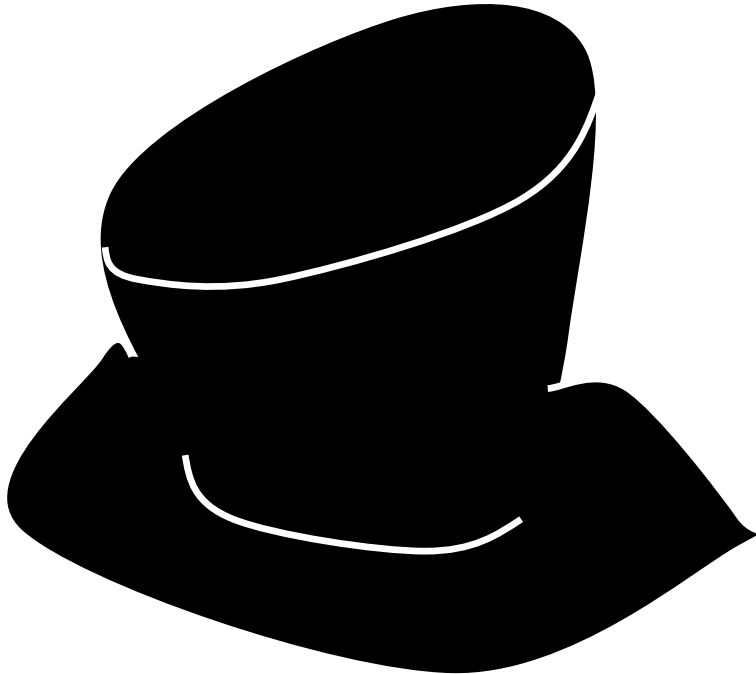
- The information seeking hat.
- What are the facts?
- What information is available? What is relevant?
- When wearing the white hat we are neutral in our thinking.

The Yellow Hat



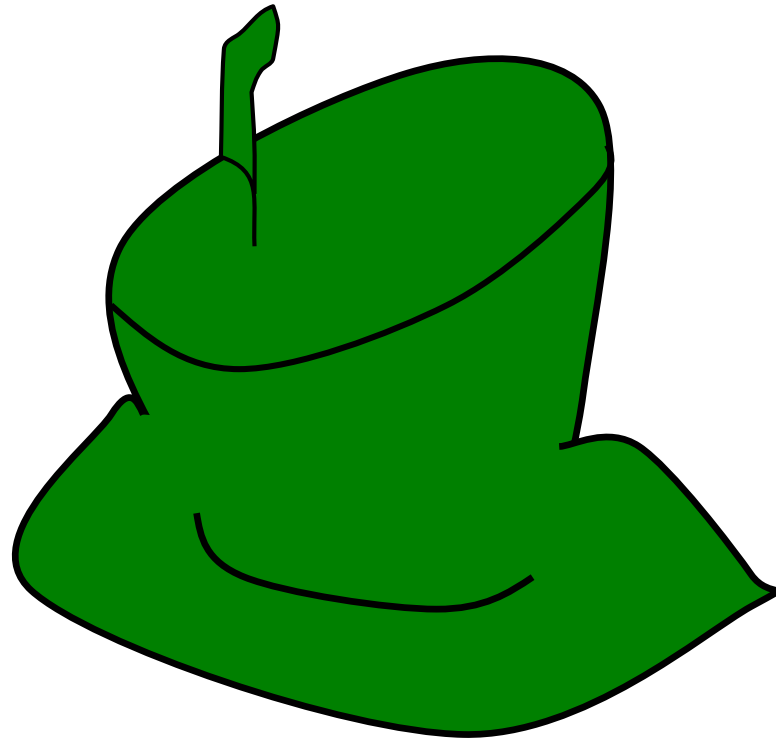
- The sunshine hat.
- It is positive and constructive.
- It is about effectiveness and getting a job done.
- What are the benefits, the advantages?

The Black Hat



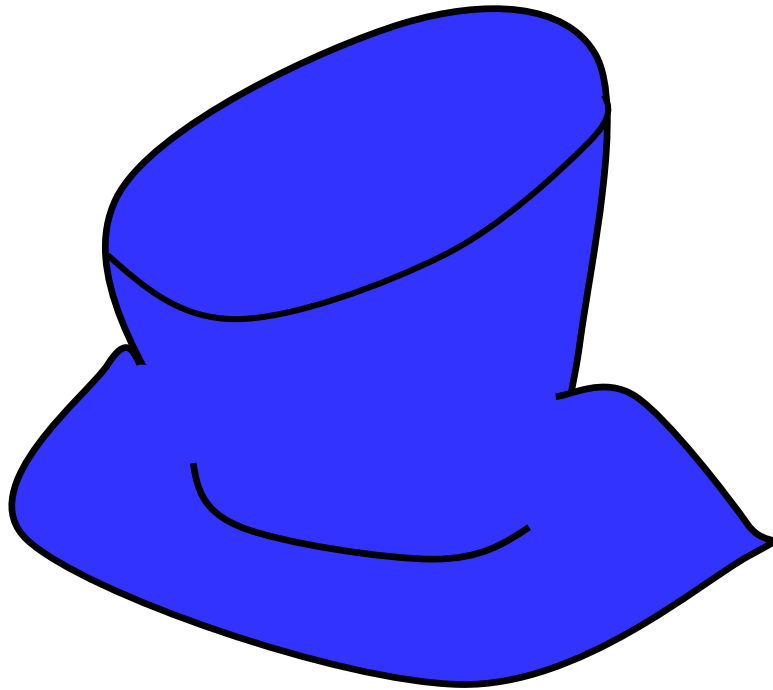
- The caution hat.
- In black hat the thinker points out errors or pitfalls.
- What are the risks or dangers involved?
- Identifies difficulties and problems.

The Green Hat



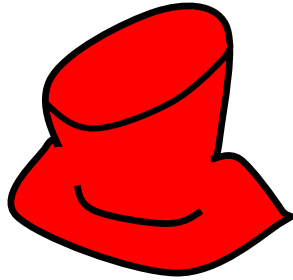
- This is the creative mode of thinking.
- Green represents growth and movement.
- In green hat we look to new ideas and solutions.
- Lateral thinking wears a green hat.

The Blue Hat

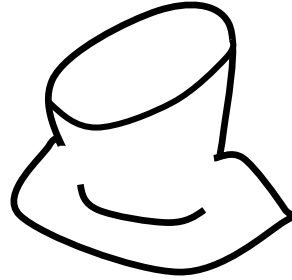


- The control hat, organising thinking itself.
- Sets the focus, calls for the use of other hats.
- Monitors and reflects on the thinking processes used.
- Blue is for planning.

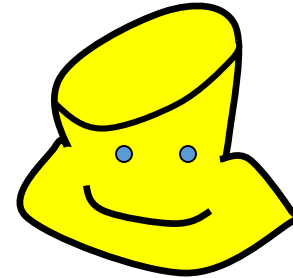
Six Thinking Hats



Intuitive

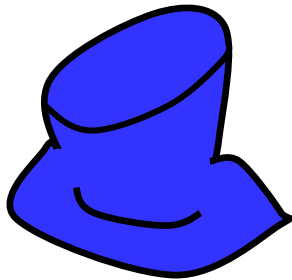


Informative

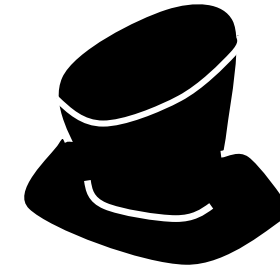
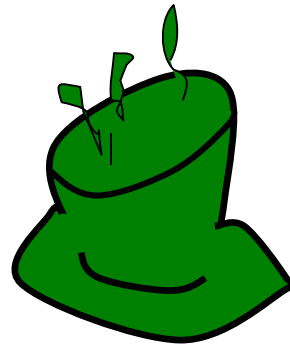


Constructive

Reflective



Creative



Cautious

Lateral Thinking



Rather puzzlin'...

- A man rides into town on Friday. He stays three nights and leaves on Friday. How can you explain it?

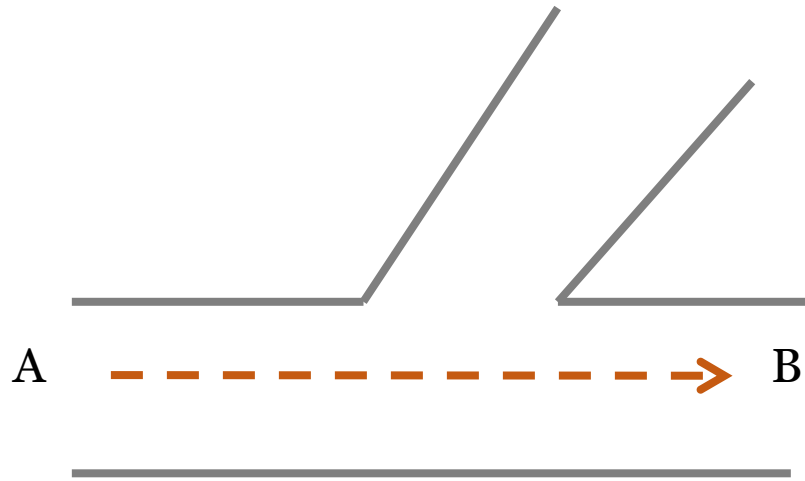


The Random Word

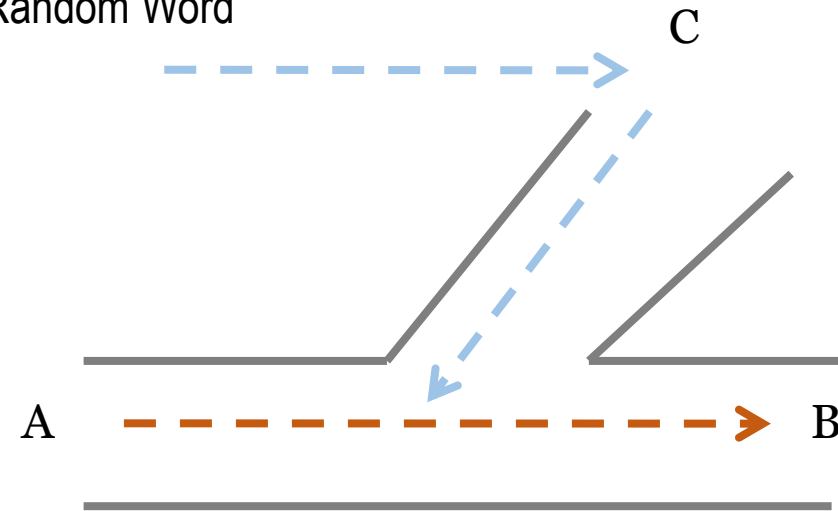
Lateral Thinking tool invented by Edward de Bono



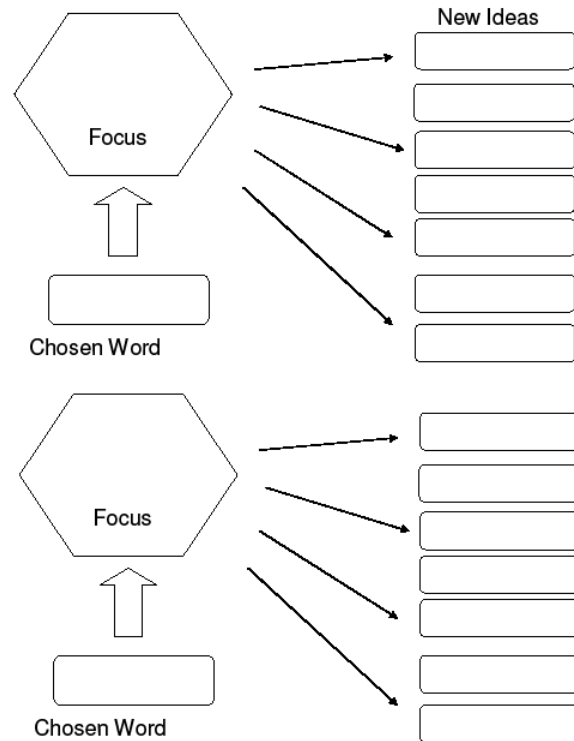
The Random Word technique



Random Word



How It Works:



- 1. Decide your focus/objective.
- 2. Select a random word from a list.
- 3. Use that random word to get new ideas.

For more information refer to *Serious Creativity*,
Edward de Bono



1.Aeroplane	16.Electricity	31.Knife	46.Pyramid
2.Air	17.Elephant	32.Leg	47.Radar
3.Album	18.Flower	33.Library	48.Rock
4.Apple	19.Foot	34.Liquid	49.School
5.Balloon	20.Fork	35.Magnet	50.Skeleton
6.Banana	21.Game	36.Man	51.Slave
7.Bank	22.Garden	37.Map	52.Snail
8.Butterfly	23.Guitar	38.Milkshake	53.Teeth
9.Button	24.Hammer	39.Mouth	54.Tiger
10.Chisel	25.Hat	40.Nail	55.Triangle
11.Church	26.Ice-cream	41.Navy	56 Typewriter
12.Circus	27.Insect	42.Needle	57.Umbrella
13.Desk	28.Jet fighter	43.Onion	58.Vacuum
14.Earth	29.Kaleidoscope	44.Post-office	59.Window
15.Egg	30.Kitchen	45.Prison	60.Worm



Let's practice!

REMEMBER:
Suspend
Judgement!

- Get in groups of 4 or 5 max.
- Choose a number from 1 to 60 and check which is your random word.
- Generate ideas on the following challenge – the Random word needs to be your stepping stone.

**Come up with ideas that will help you
cultivate a culture that promotes
thinking in the classroom**



Conclusion

