
TABLE OF CONTENTS

Convergent Thinking	1	Deductive Thinking	20
Easy As ABC	2	The Homework Assignment	21
Tutti-Fruiti's Tomb	2	Space Age Survey	21
The Pizzeria Problem	3	Coin Caper	22
The Three Wishes	3	A Sad Story	22
Happy Birthday to You!	4	Mysterious Mathematics	23
Class Logo Time	4	<i>Weight</i> a Minute!	23
Travel Tips	5	Squares Rule!	24
Invention, Anyone?	5	Caesar Cipher	24
The Perfect Playroom	5	Stick 'Em Up, Dexter!	25
Candyland	6	House Party	25
The Coolest Person in the World	6	The ABC Code	26
What's My Line?	7	The Magic Square	26
A Tool for the Future	7	Case of the Missing Numbers	27
Kidsland, Here We Come!	8	All Aboard!	28
Unlikely Combos	8	What's the Code Word?	28
Who's Game for a Game?	9	The Riddle of the Sphinx	29
Home Sweet Home	9	Coin Trick	29
Grab That Ad!	10	Sequencing and Following	
Leonardo's Legacy	10	Directions	30
Divergent Thinking	11	Alphabet Soup	31
Hilarious Horoscopes	12	The Name Game	31
The <i>Intergalactic Times</i>	12	Playing with Shapes	32
B.J.'s Blues	13	Your Own Treasure Map	33
The <i>Bear</i> Facts	13	Snack Facts	34
Lunchtime Dilemma	14	The Listening Game	34
Camp Wishy-Washy	14	Sing-Song	35
Stop, Thief!	15	The Times of Your Life	35
Give 'Em a Hand!	15	The Chocolate Cherry Banana Milk Shake	36
The Ultimate Video Game	16	Surf's Up!	36
Whistle While You Work	16	Map Your School	37
Save the Wozzles!	17	Gilligan's Island Revisited	37
Space, the Final Frontier	17	Out on a Limb	38
Beans to You!	18	See Australia First	38
Adopt-A-Pet	18	Word Transformers	39
How <i>Fuel-ish</i> of You!	19	Answers	40–43
A <i>Wheel-ly</i> Big Project	19		

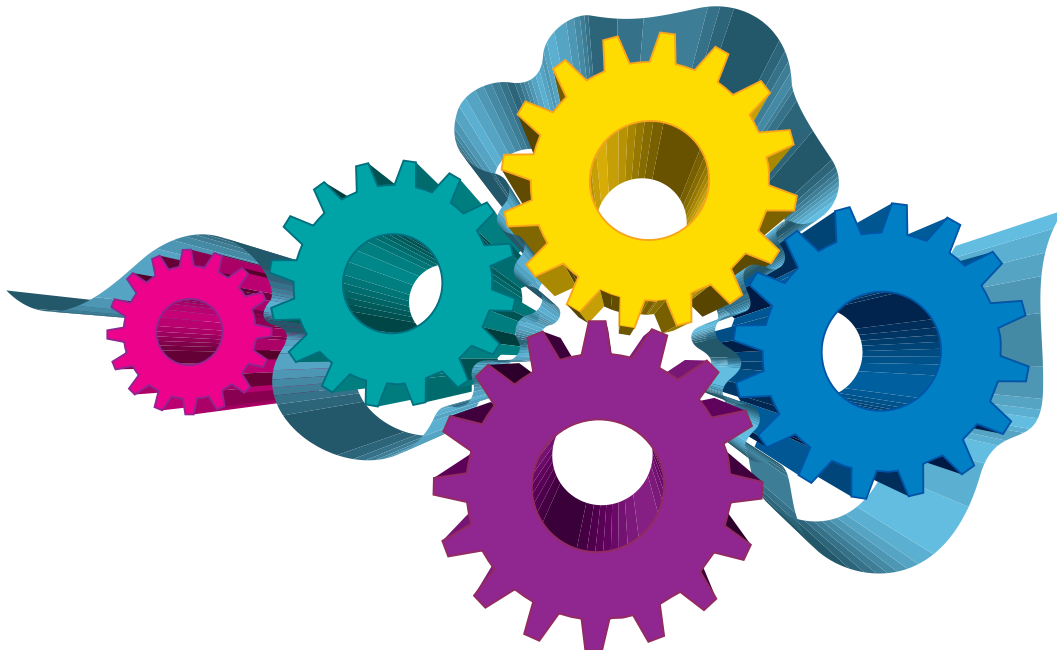
CONVERGENT THINKING

To converge means to approach the same point from different directions. Convergent thinking involves analytical reasoning, evaluating the possibilities, and narrowing down criteria toward a single goal.

Convergent thinking may be compared with a funnel. If the goal was to pour a litre of water into a long-necked bottle, the scientist would use a funnel to focus the direction of the water as it flows into the bottle. When the goal in the classroom is to select the best solution to a problem, the student may use convergent thinking strategies to focus his or her attention, in order to accomplish the goal of solving the problem.

Convergent thinking activities will benefit all the children in the class, especially abstract-random thinkers. The activities help abstract-random children focus attention on a single goal and not be sidetracked by the multitude of interesting possibilities.

Convergent thinkers are characterised as precise, detail-oriented, and conformists. Examples of typical convergent thinkers are scientists and mathematicians.



Easy As ABC

Think of the ABC books you looked at when you were learning to read. Most of them were pretty boring, right? Here's your chance to show adults what kids REALLY like to see. You can make your own ABC book!

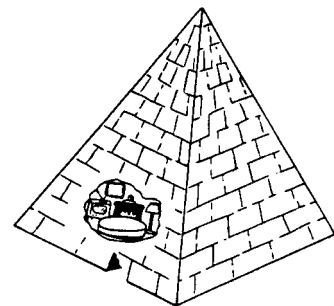


- ❖ Brainstorm all the interesting nouns you can think of for the letter A, then B, then C, and so on to the letter Z.
- ❖ Choose one noun for each letter.
- ❖ On separate sheets of white paper, write each letter and the name of the noun. Draw a picture of each noun and colour it.
- ❖ Design and illustrate a cover for your book. Add a plain sheet for the back page.
- ❖ Punch holes in either the top or the left side of your book, and tie it together with brightly coloured string.

Tutti-Fruiti's Tomb

You live in ancient Egypt. Your ruler, Pharaoh Tutti-Fruiti, just died. You are in charge of preparing the royal burial chamber in his pyramid. Since you are an Egyptian, you believe that in the afterlife, your pharaoh will continue to need all the everyday objects that he had used while alive.

Now, Tutti-Fruiti LOVED to be comfortable, and he needed lots of servants and things to make him happy. However, he had spent so much on himself while alive, that there was little gold left over to pay for his pyramid. So all he gets is a little dinky pyramid. Your problem is deciding which of all Tutti-Fruiti's possessions should be placed inside the pyramid to keep him happy. Remember, he needs everything that you need daily, such as food, clothing and furniture, as well as pharaoh stuff, like a royal throne and servants. You only have two small rooms in which to put everything, including Tutti-Fruiti's coffin.



- ❖ Make a list of the contents of Tutti-Fruiti's tomb.

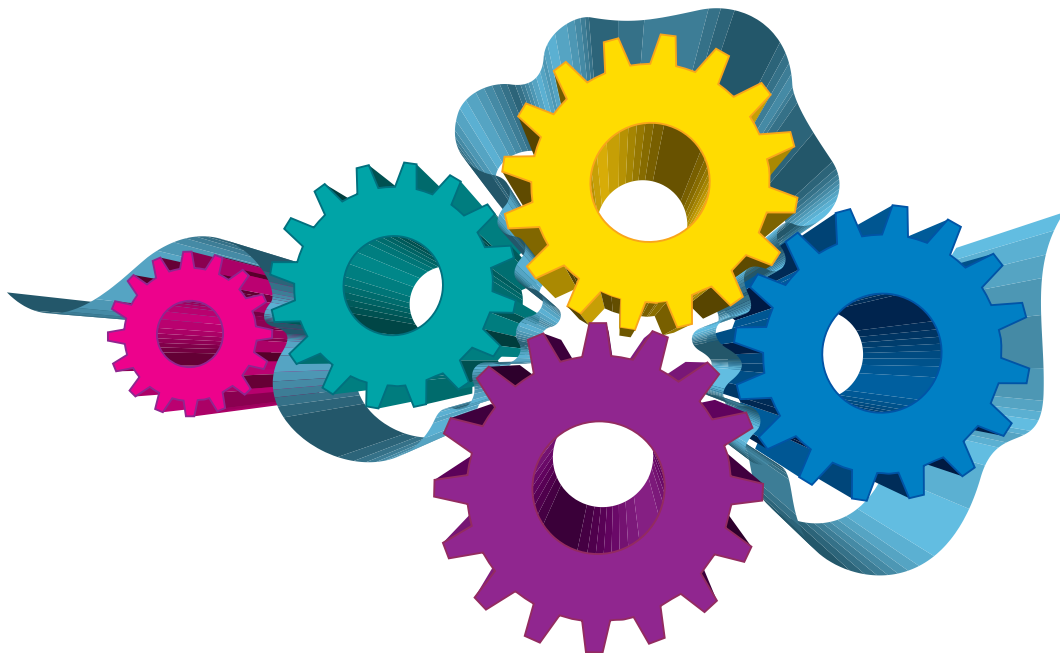
DIVERGENT THINKING

When teachers tell students to *think creatively*, they usually mean *think divergently*. To brainstorm a variety of solutions, to give up old ways of using objects in favour of new ways, and to generate ideas quickly are all hallmarks of divergent thinking.

An analogy may be drawn between divergent thinking and a fireworks display. The gunpowder and chemical rockets are packed into a single tube. When the fuse is lit and ignites the combustible gunpowder, the rocket shoots out of the tube and explodes into a shimmering display in the sky. So, too, with divergent thinking. The student is given a single problem to solve. When the imagination is lit, multiple solutions arise in the student's mind (sometimes faster than they can be written down!).

Divergent thinking gives concrete-sequential thinkers a chance to become more flexible in their thinking. Divergent activities reassure the children that it is all right to come up with many ideas because there is not only one right answer—this provides a safety net for exploration and experimentation.

Divergent thinkers are characterised as non-conformists and risk-takers. Artists, musicians and actors are traditionally labelled as divergent thinkers.



Hilarious Horoscopes

Madam Zelda, the world famous astrologer, is extremely upset. Her crystal ball is cracked, and she has to take it into Cracked Crystals-R-Us for repairs. The problem is, she must deliver her horoscope predictions for all twelve signs of the zodiac to the newspaper today. Without her crystal ball, she cannot make predictions, and if she does not make predictions, she will be fired by the newspaper. You tell her to relax—YOU will take care of everything!



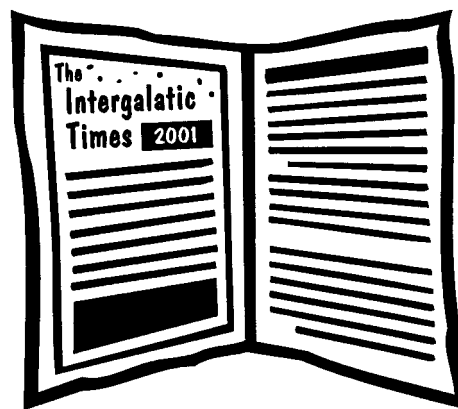
- ❖ Write a silly prediction for each of the twelve signs of the zodiac. For example: Aries (March 19 to April 19). Watch out for sleeping bulls. After all, you don't want to be run over by a bulldozer!

The *Intergalactic Times*

It is the year 2101. You are the editor of the newspaper *Intergalactic Times*. What information will you include in the next edition? What do people want to know? What do they need to know? Remember, a good news article answers the following questions: who, what, when, where, why and how.

- ❖ Create the next edition of the *Intergalactic Times*. Analyse newspapers of today for content and design layout. Possible articles and information could include:

- News stories
- Sports
- Comic strip(s)
- Advice column



- Advertisements
- Want ads
- Weather report
- Obituaries

DEDUCTIVE THINKING

'I say, Holmes', Dr Watson exclaimed, 'how did you know that the one-armed man wearing a Burmese turban and whistling "God Save the Queen" was the same person who stole the Devonshire Diamond from the Tower of London in broad daylight?'

'Elementary, my dear Watson', replied Sherlock Holmes.

It may be 'elementary' to Sherlock Holmes, but his methods of detection invariably fall under the category of deductive thinking. To draw conclusions by logical inference from a given idea, to conclude that if $A=B$ and $B=C$ then $A=C$, and to reach a solution to a problem by reasoning, are all descriptions of deductive thinking.

Mathematics and logic use the deductive method extensively. Science uses a combination of deduction (logical conclusions) and induction (probabilities).

Commonly thought of as 'brain teasers' or 'mini-mysteries', deductive thinking activities challenge the student to find logical solutions to puzzling situations. Such activities give abstract-random thinkers practice in a logical step-by-step approach to problem solving. In addition, the activities are just plain fun!

