

Introduction

Staying physically fit has never been more popular or more important than it is today. An abundance of exercise videos, aerobics classes and fitness programs are readily available almost everywhere. As a classroom teacher, however, you know that it is just as important to be in shape mentally as physically. The ability to think quickly and critically is an essential skill, one that needs to be practised frequently in the classroom.

Your students will indeed get a mental workout as you pose the more than 400 questions in this book. *Mental Aerobics* is a book filled to capacity with busy brain benders, terrific trivia, perplexing puzzles and important information. It will give those wandering minds some much-needed exercise!

This book is written in a 'ready-to-use' format. Simply pick it up, open to any page, and read a question aloud to your students. Using only mental skills and computations, students will be challenged to think and respond quickly. No paper, worksheets or pencils are required! It is an invaluable resource for those spare minutes between assignments or at the end of class periods, when you want to fill even a little time with a focused, worthwhile activity.

Mental Aerobics has been written for use in any classroom in the intermediate, upper, and even adult levels. Subjects covered vary widely, including everything from acronyms to anatomy, from metaphors to measurements. You will also find logic questions and general knowledge questions, making this the perfect resource for cross-curriculum classes. Throughout the book you will find a wide range of difficulty levels. If some questions seem too difficult or too easy for your group, simply skip over them. Remember: Since students are listening to the problems and doing all computations mentally, some questions may be harder than they appear.

Answers are included along with the questions for your quick reference. Some questions have precise answers, while others are open-ended. In these cases, possible answers are listed so you will be able to guide discussion and contribute sample solutions easily. Often extra background information is provided for your benefit. This book can also be the springboard for further research projects.

Hopefully, *Mental Aerobics* will become one of your favourite pieces of mental exercise equipment as you challenge your students to listen and think. Enjoy the workout!

How to Get the Most Out of This Book

Extend the learning. Some of the questions ask about historical facts, current populations, the top crop-producing countries and so on. Sometimes, students will know the correct answers. In this case, challenge them to give even more details. For example, if they know the top coffee-producing countries in the world, do they know the top five? For some of the questions, students may not have any solutions. In these instances, you may wish to assign them as bonus research challenges. Students could be required to find the answers on their own time, even taking them home and asking their families for input.

Some questions ask students to list a maximum number of answers to a particular problem. For these you may wish to record a composite list on the blackboard, which can then be copied on paper and added to later. Whenever possible, allow time to discuss a wide variety of outcomes so that students are exposed to as many correct answers as possible.

Solve mathematical problems mentally. Many of the questions require mathematical computations. Read the question to yourself first to determine whether your students can solve it without paper and pencil. If so, do not allow them to write it down! However, if it is appropriate to have students jot down numbers or instructions, be certain that they have scrap paper and pencil ready.

Visualise geographical situations. Some questions concern bodies of waters, continents and countries. Encourage students to give their best answers without looking at a map. Then review correct situations with them while they check their atlases.





1 An antique dealer bought a silver spoon for \$5 and sold it for \$6. He then bought the same spoon back for \$7 and sold it for \$8. How much profit did the dealer make in all?

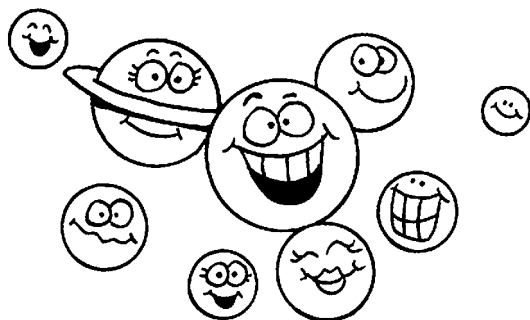
Answer: \$2 - He made \$1 profit on the first transaction and another \$1 on the second.

2 How many colour words can you list that have no rhymes?

Possible answers: purple, orange, silver, turquoise, aqua.

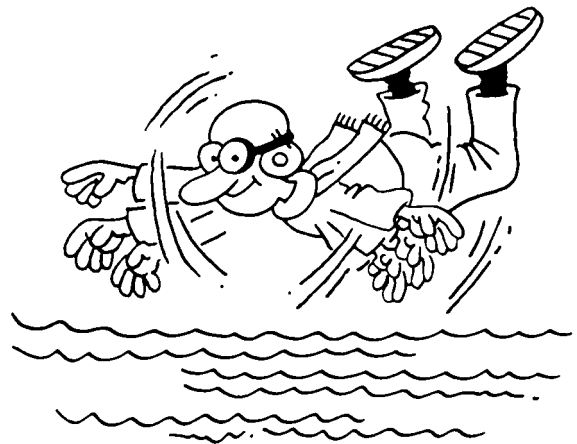
3 List the nine planets of our solar system in alphabetical order.

Answer: Earth, Jupiter, Mars, Mercury, Neptune, Pluto, Saturn, Uranus, Venus



4 If you were to fly from Dublin to London to Paris, over which bodies of water would you travel?

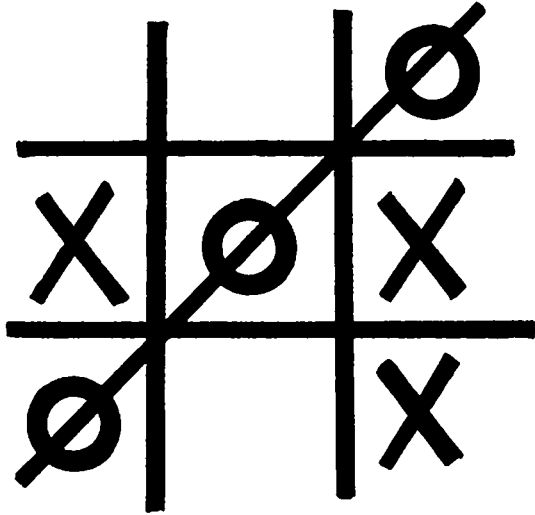
Answer: the Irish Sea and the English Channel



5 Even numbers can be written as the sum of two primes. For example, the number 22 can be written as the sum of 3 + 19 or 11 + 11. Find two primes that will total each of these even numbers:

- A. 20
- B. 30
- C. 40
- D. 48

Answers:
A. 7 + 13
B. 11 + 19
C. 17 + 23
D. 19 + 29



6 How many ways can you win at noughts and crosses?

Answer: 8 - There are three ways horizontally, three ways vertically, and two ways diagonally.

7 We use many words and phrases that contain references to the weather. For example, we ask for our eggs cooked sunny-side-up. Try to list at least five more similar weather phrases.

Possible answers: slush fund, stealing someone's thunder, a flood of applicants, brainstorming, to shoot the breeze, etc.

8 Which of these cities is not in Russia?

- A. St. Petersburg
- B. Grozny
- C. Murmansk
- D. Kiev

Answer: D. Kiev is in Ukraine.

9 After which war was the League of Nations formed?

Answer: World War 1

10 Name all of the Seven Dwarfs.

Answer: Bashful, Sleepy, Dopey, Doc, Happy, Sneezy, Grumpy





11 What is the world's second tallest mountain?

Answer: It has three names - K2, Dapsang and Mt Godwin Austen

12 Which country does not border China?

- A. India
- B. Iran
- C. Russia
- D. Mongolia

Answer: B. Iran

13 In fiction, who was the character named Jacob Marley?

Answer: In Dickens' *A Christmas Carol*, he was the deceased partner of Ebenezer Scrooge.

14 A brother and a sister each have the same amount of money. How much should the sister give her brother so that he has ten dollars more than she does?

Answer: \$5. (If she gave him \$10, then he would have \$20 more.)

15 A chevron would most probably be worn by someone in which of these professions?

- A. doctor
- B. soldier
- C. priest
- D. painter

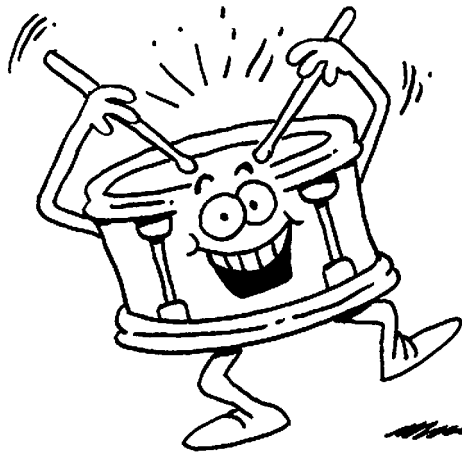
Answer: B. soldier





16 Name at least four different types of drums.

Possible answers: tom-tom, snare, bass, timpani, conga



17 What was built first; the Sydney Harbour Bridge or the Sydney Opera House?

Answer: Sydney Harbour Bridge opened 1932; Sydney Opera House opened 1973.

18 In a single-elimination soccer tournament with 16 teams, how many games will have to be played to determine the winning team?

Answer: 15; Fifteen teams have to be eliminated which requires 15 games.

How many games will the winning team have to play in this same tournament before it is declared the winner?

Answer: four games—In each of four rounds, half of the teams win. First eight teams win, then four teams, then two teams. In the fourth round just one team wins.

19 What is the name of the Prime Minister's official residence in Canberra?
In Sydney?

Answer: Canberra: The Lodge
Sydney: Kirribilli House

20 Who was Australia's first female cabinet minister?

Answer: Dame Enid Lyons, vice president of the Executive Council 1949-51