

QUICK THINKING!

There are two great games on this cassette – **Sum Vaders**, and **Robot Tables**. They are taped in this order on Side A, with back-up copies in the same order on Side B (except for Commodore 64 – See below).

You can avoid long waits by running the tape through on Fast Forward, or Rewind, until you find the program you want. If you have a tape counter on your recorder you can use it to locate the programs easily if you note the readings at the start of programs, having first set the counter to zero at the tape start.

You are automatically given the choice to load Robot Tables when you take the exit option from Sum Vaders (except for Commodore 64 users).

To Load Quick Thinking:

SPECTRUM USERS

For Sum Vaders:

- type **LOAD "VADERS"** and press **ENTER**

For Robot Tables run the tape forward until you find the gap between program recordings and:

- type **LOAD "ROBOT"** and press **ENTER**

The on-screen instruction STOP THE TAPE will tell you when loading has finished.

COMMODORE 64 USERS

For Sum Vaders (Side A) and Robot Tables (Side B):

- hold down **SHIFT** and press **RUN/STOP**
- release **RUN/STOP** before **SHIFT**

When the screen displays FOUND VADERS or FOUND ROBOT:

- press the Commodore Key **C**

ELECTRON/BBC B USERS

For Sum Vaders:

- type **CHAIN "VADERS"** and press **RETURN**

For Robot Tables run the tape forward until you find the gap between program recordings and:

- type **CHAIN "ROBOT"** and press **RETURN**

The on-screen instruction STOP THE TAPE will tell you when loading has finished.

FOR ALL MACHINES

To Restart a Game in Progress

- hold down **CAPS SHIFT** and **Z** together until the game stops
You will be returned to the choices offered at the start of the game.

Playing the Games

Sum Vaders

Alien invaders in numbered space ships fly into vision, hover and drop an invading robot, also bearing a number. The aim of the game is to eliminate the robot before it lands on Earth. In the Adding version of the game this is done by adding the two numbers together. In the Subtracting version the Robot's number must be taken away from the space ship's number.

Typing in the correct answer before the robot lands destroys the robot.

If you are wrong or too late, the robot will land. The correct answer is displayed.

After you have entered a number of right answers the game speeds up, the space ship flies in at a lower level, and you get a shorter time in which to answer. As the speed increases the score given for each correct answer also goes up.

The game ends when five robots have landed. In each game session the best score is recorded on the screen.

The game can also be played by two players, each choosing a different level of difficulty. This allows a child to play an adult and still have a chance of winning. In the two-player game, high scores are separately recorded for each player.

At the end of each game there is a choice to play again at the same level (press **1**) or return to the choices at the start of the game (press **0**).

At the start of the game these are the choices you will be offered:

Adding or Subtracting

- press **A** for adding sums
- press **S** for subtracting sums

Instructions for players

- press **N** to see illustrated instructions
- press **1** for one player
- press **2** for two players
- press **0** to stop

Level of Difficulty

- press **1** : only numbers up to 9 are used
- press **2** : one number is in multiples of 10, and the other is a single digit (eg $30+7=37$ or $50+2=52$)
- press **3** : two digit numbers may be used, but a carry is not produced
- press **4** : any numbers up to 99
- press **5** : as choice 4, but the action can get very fast!

When there are two players, Player 1 chooses the level of difficulty first, as shown in the on-screen instructions.

Robot Tables

You are in charge of a robot making machine and your aim is to make a sequence of 10 perfect robots. The raw material you need to make each robot in the sequence is fed automatically to the machine. Each lump of raw material carries a number and you must tell the machine whether or not the number on the lump is the next in sequence.

Only two controls are used:

- press **1** if the raw material number is the next (or first) correct number in the sequence
- press **SPACE** if the raw material is **not** the next correct number in the sequence

Which number is right?

You find out the right numbers in the sequence by working out multiplication tables in your head. A panel on the front of the machine shows which multiplication table is being used for a sequence.

For example, if the panel shows that the multiplication table is 3, the raw material you accept for the machine to

make the first robot is 3. All other numbers must be rejected. Raw material for the second robot must be numbered 6, for the third, 9 and so on.

The multiplication table in use might be any number up to 12, depending on which level of difficulty you have chosen.

What does the machine do?

Suppose we are still on the three-times table and we are starting to make the first robot.

If the raw material is numbered 3, which is the right answer, and you accept it (press **1**), the machine makes a perfect robot. If you reject it (press **SPACE**), the machine makes a damaged robot.

But what happens if the first lump of raw material is not numbered 3, let's say its 4 for example? If you accept it (press **1**) the machine burns up the raw material. If you reject it (press **SPACE**), the machine recycles the raw material.

Scoring points

You score points for making good robots and for recycling material. You lose points for bad robots and wasted material. A panel on the right of the machine records your score. You earn bonus points for every sequence of 10 perfect robots.

The machine's speed is fixed and you must answer while the indicator light is green, before the raw material enters the main machine. There is a warning sound before the light turns red and you miss your chance to answer.

Learning and Testing

There are two modes for the game—Learning, and Testing.

Learning mode displays the number sequence of the table before the game starts. There is a generous response time

and answers are displayed after each robot is made.

Testing mode has a shorter time in which to respond and answers are not displayed until the end of a sequence of 10 robots. However, more points are awarded for correct answers (and lost for wrong ones!).

At the start of the game these are the choices you will be offered:

Instructions and mode

- press **N** to see instructions
- press **S** for the Learning mode (slow)
- press **F** for the Testing mode (fast)
- press **0** to stop

Groups of Tables

- press **1** for 2 times table only
- press **2** for 2, 3, and 10 times tables
- press **3** for 2, 3, 10, 5, and 11 times tables
- press **4** for 5, 11, 4, 6, and 9 times tables
- press **5** for 6, 9, 8, 7, and 12 times tables

Have you problems loading the program?

1. Have you remembered to press **ENTER** or **RETURN** as appropriate?
2. Has the cassette been fully re-wound?
3. Are your tape recorder leads connected properly? Refer to your computer's user manual.
4. Check the volume level of your cassette recorder. Is it correct?
5. Please check that you have followed all equipment and loading instructions very carefully.
6. Commodore 64 users: make sure the Shift Lock is off when playing these games.