



SCAVENGER HUNT

Teacher's Guide

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A product of Jacaranda Software

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BBC version programmed by David L. Smith
Commodore 64 versions programmed by Philip O'Carroll
Microbee versions programmed by Tony Zadravec

Preface

Scavenger Hunt is one of a suite of computer programs that have been written to complement *Moving Into Maps*, the pre-atlas activity book in the Jacaranda Atlas Programme. Designed for use by students from 7 to 13 years of age, *Scavenger Hunt* provides an extension activity for the "Lost and Found" section of *Moving Into Maps*. However, as the computer program is entirely self-contained and self-explanatory, it will be useful in any classroom where basic map concepts are being taught. It is not necessary for schools to be using other materials from the Jacaranda Atlas Programme in order to use *Scavenger Hunt*.

Aim of the program

Scavenger Hunt is a computer simulation program that provides an opportunity for students to practise these basic map skills:

- Identifying and using the eight major compass points (north, south, east, west, north-east, north-west, south-east and south-west)
- Estimating distance according to a scale demonstrated by the computer.

About the program

The computer screen displays a scene in plan view, with a range of objects represented by pictorial symbols. From one to four students can play; each moves a small stick figure around the scene in certain directions and for certain distances. Each student has a different list of objects to locate and must control the movement of his or her figure so that each object is successfully "collected". As a figure moves about it must negotiate obstructions. For example, it can't go through a fence except by a gate, and there is a creek that can't be crossed except by a bridge.

The objective is for the students to collect all the items on their lists. Once they have become familiar with the program, children will be keen to find the best route for collecting

everything in the fewest possible moves. This is not easy and there is usually plenty of discussion among players, both during and after the activity, about what the best strategy might be. Therefore, the program also encourages group discussion and helps to develop planning and problem-solving skills.

Prerequisite understanding

To use this program successfully, students should have at least some understanding of direction and distance: the program is not intended to *teach* these skills. Instead *Scavenger Hunt* will allow students to *practise* using these basic map skills in an original and entertaining manner.

Time required to use this program

Completing the program may take from twenty minutes to an hour, depending on the number of students who are involved and their familiarity with the program. Normally the program goes on until everyone has finished, when final scores are displayed.

Teachers can, however, end the program before everyone has finished by pressing CTRL-P at certain stages during the running time. (Please refer to the operating instructions on page 7 for information on the use of CTRL-P.)

How the scores are determined

At the end of the program, students are told how many objects they found, the number of moves they made, and how many (if any) errors were made by trying to collect things that were too far away from their stick figures. Moves (at 5 points each) and errors (also 5 points each) are added to give a total score. If the game has ended normally (when all students have collected all objects on their lists), the lowest score wins.

However, if the game has been ended early (by using CTRL-P) then the winner is the student who has collected the most objects. (In the case of a tie, the winner must also have the lowest score.)

Teacher involvement

It is usually unnecessary for the teacher to supervise the students to any great extent when they are playing *Scavenger Hunt*. The program is easy to use and children will gain greater educational benefit from correcting their own errors. However, it is important to ensure that they understand

- when to use the RETURN key,
- what the SPACE BAR is, and
- how to ask the computer for HELP.

The HELP routine

The program is able to offer help in a number of ways:

- It can remind students what is on their lists, which objects have been collected and give hints about where to find the remaining items.
- It also reminds students about the compass directions they are using and allows them to try out moves in these directions, thus helping them to judge distances.
- Finally, it will provide students with current information about their scores.

Noises?

You can cancel all the various tunes and noises that are produced in *Scavenger Hunt* by pressing "Q" instead of the SPACE BAR at the very beginning of the program. The operating instructions (page 4) give full details.

Conclusion

In *Scavenger Hunt* we have tried to embody the Jacaranda Software philosophy:

- Students drive the computer, not the other way round.
- The computer doesn't replace teachers, blackboards, playgrounds or books — it complements them.
- Activities that may be inaccessible, time-consuming or expensive can, through computer simulation, be made readily available in the classroom.
- Education should be fun, exciting and effective.

Operating instructions

Getting started on the Apple

1. Insert the *Scavenger Hunt* disk (label side up) in the disk drive. (Do not shut the door of the drive yet.)
2. Switch on the monitor.
3. Switch on the computer.
4. When the red light on the disk drive is glowing, shut the door of the drive.
5. The Jacaranda Software logo will appear on the screen. Pressing any key will cause the *Scavenger Hunt* title screen to appear; otherwise, if no key has been pressed, the title screen will load automatically after a short pause.
6. Once the title screen has appeared, press the SPACE BAR to start the program.
If you wish the program to run silently (that is, with no music or error noises), press "Q" to start the program instead of pressing the SPACE BAR.

Getting started on the BBC

1. Switch on the monitor.
2. Switch on the computer.
3. Insert the *Scavenger Hunt* disk (label side up) in the disk drive and shut the drive door.
4. Hold down the SHIFT key and press the BREAK key, then release the BREAK key *before* taking your finger off the SHIFT key.
5. The Jacaranda Software logo will appear on the screen. Pressing any key will cause the *Scavenger Hunt* title screen to appear; otherwise, if no key is pressed, the title screen will load automatically after a short pause.
6. Once the title screen has appeared, press the SPACE BAR to start the program.
If you wish the program to run silently (that is, with no music or error noises), press "Q" to start the program instead of pressing the SPACE BAR.

Getting started on the Commodore 64 Cassette:

1. Switch on the computer.
2. Switch on the monitor.
3. Put the tape into the cassette drive (label up).
4. Rewind the tape, then stop.
5. Hold down the computer's SHIFT key and tap the RUN/STOP key.
6. Press play on the cassette drive.
7. The screen will go blank for several minutes.
8. When the program is loaded, the Jacaranda Software logo will appear. Soon after, the title screen will appear. Press the SPACE BAR to start the program. If you wish the program to run silently (that is, with no music or error noises), press "Q" to start the program instead of pressing the SPACE BAR.

Disk:

1. Switch on the computer.
2. Switch on the monitor.
3. Switch on the disk drive.
4. After the light goes out, insert the disk (label side up) and shut the door of the disk drive.
5. Type LOAD "SCAV*",8: (Don't forget the colon.)
6. Hold down the SHIFT key and tap the RUN/STOP key.
7. Wait for the program to load. When it has loaded, the Jacaranda Software logo will appear. Soon after, the title screen will appear. Press the SPACE BAR to start the program. If you wish the program to run silently (that is, with no music or error noises), press "Q" to start the program instead of pressing the SPACE BAR.

Getting started on the Microbee Cassette:

Important: The cassette has the program recorded on both sides, but at different speeds. Side A is at 1200 baud, which is the normal speed. Side B is at 300 baud, or four times slower. The program should normally load from side A; however, some

cassette recorders do not work reliably at 1200 baud. If you have any difficulty loading from side A, try loading at 300 baud from side B.

1. Turn on the monitor.
2. Turn on the computer.
3. Type NEW and then press the RETURN key.
4. Type LOAD and then press the RETURN key.
5. Start the tape.
6. The program loads in two parts. Shortly the title screen will appear and the computer will beep. The letter "M" will appear, followed by a flashing "**", while the main part of the program is loading. Wait until the computer beeps again to indicate it has loaded the program (2–3 minutes at 1200 baud).
7. Turn off the cassette and rewind the tape.

Disk:

1. Turn on the monitor.
2. Turn on the computer.
3. Put the MASTER disk into the disk drive (label side up). If you have a dual disk drive, put it into the one with the light on.
4. Type BASIC and then press the RETURN key. Wait until the computer beeps.
5. Take out the MASTER disk and insert the *Scavenger Hunt* disk in the same drive, label side up.
6. Type RUN "SCAV" and press the RETURN key.

Note

Students should be aware that, whenever they see the → sign on the screen, they will be required to type an answer and press the RETURN key (the ↵ key on the Apple IIe). See page 4 in the Student's Guide.

Students must also understand what "Press the SPACE BAR" means.

Introduction

1. The program begins with four screens of brief explanation. Press the SPACE BAR to advance each screen.

2. Students must choose a direction and type the letters for that direction. (Students may also get help. HELP will be explained later.)
3. The computer will now ask:
HOW FAR DO YOU WANT TO GO (IN STEPS)?
CHOOSE A NUMBER FROM 1 TO 40.
IF YOU CHANGE YOUR MIND, TYPE 0.
HOW FAR? →
4. The computer will then attempt to move the student's figure accordingly. If the selected distance is not permissible (i.e. the stick figure encounters an obstacle), an appropriate message will appear on the screen, the stick figure will move back to where it started, and the student can try again. Each move or attempt to move adds 5 points to the student's score.
5. Once a student has moved a figure successfully, it will be the next player's turn.

(2) COLLECT SOMETHING

1. If a student elects to collect something, the computer will display that student's *Scavenger Hunt* list. The student will be asked to specify which object is to be collected. (The names of objects that have already been collected will be easily identifiable.)
2. If the student's stick figure is in the right place to collect the nominated object, this message will appear:
YOU HAVE BEEN SUCCESSFUL!
YOU NOW HAVE THE (object name)
IN YOUR BAG.
PRESS THE SPACE BAR TO CONTINUE.
Following a successful collection, the *next player* will have a turn.
3. If the stick figure is unable to collect the object because it is too far away from it, the student will receive a message specific to the particular problem. For example, the message may be:

YOU CAN'T COLLECT THE (object name).
YOU ARE TOO FAR TO THE SOUTH.
PRESS THE *SPACE BAR* TO CONTINUE.

Such an error will add 5 points to the student's score.

The *same student* will then have an opportunity for another turn and can try to move the figure into a better position for collecting the object.

(3) GET HELP

(Same as HELP in the MOVE option)

1. Asking for HELP provides the student with a further list of options:

WHAT SORT OF HELP DO YOU WANT?

- (1) HELP WITH WHERE TO FIND THINGS.
- (2) HELP WITH DIRECTION AND DISTANCE.
- (3) SEE YOUR SCORE.

Each option is explained below:

HELP WITH WHERE TO FIND THINGS

The student's list of objects will be displayed and any objects that have been collected already will be marked appropriately. By pressing the *SPACE BAR* students may step through a series of hints about the location of each object they have yet to collect.

HELP WITH DIRECTION AND DISTANCE

- (i) The computer will change the screen picture to another display that shows a large eight-point compass on the left and a stick figure the same as that used in the game on the right.
- (ii) Students will see text at the bottom of the screen similar to that displayed in the MOVE option. They must choose a direction and type the letters for that direction.
- (iii) Students may now select a distance to travel (from 1 to 40 steps).
- (iv) The computer will demonstrate the direction and the distance selected by moving the figure as specified.

- (v) Students may move the stick figure again if they wish.
- (vi) In this way students can practise moving and judging distances without wasting a turn. These practice moves do not affect the position of the student's stick figure in the real *Scavenger Hunt* display.

SEE YOUR SCORE

The information displayed on the screen will tell the student how many things he or she has collected, how many moves have been made, how many mistakes have been made and the total score at that stage.

2. Selecting HELP does not use up a student's turn. Once enough help has been received the student may choose again from the main options.

End

1. The game will end once all students have collected all things on their lists. The game can also end if the CTRL-P option is used.
2. The computer does not need to be turned off if another game is wanted. Students can respond to screen questions to play again, or to end the program.