







# 1-10.2 Accessorising

Activity Page

## Infant K1 Coding Pack: 1-10.2 Accessorising

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Students program Roamer to go from shop to shop until they find a high-end designer belt.

Subjects	Age	Roamer Expertise	Student Grouping	Lesson Time	Availability
Computing Mathematics	Year 2 Year 1				

### Description

Based on the 9<sup>th</sup> Labour of Hercules (getting the girdle of Hippolyta, Queen of the Amazons) the Grand Torque challenges Roamer to go shopping for a designer belt.

Randomly place four 'belt shops' in an open space. Roamer doesn't know anything about designer belts so he decides to buy one from each shop. The children must estimate distance and turning movements needed and write a program that makes Roamer do this. They must allow 3 seconds to buy the belt at each shop. Students must write a single program and keep debugging it until it is correct.

### Objectives

Students have the opportunity to:

1. Write and debug a program
2. Estimate distance
3. Estimate the amount of turn

### Secondary Objectives

Students have the opportunity to develop:

1. Teamwork skills
2. Communication skills

### KS1 Computing Pack

[Index to KS1 Computing Pack Activities.](#)



# 1-10.2 Accessorising

## Lesson Plan and Assessment

### Preparation

#### 1. Basic Set Up

1. Reserve use of large space like the school hall.
2. Print Out Roamer Starter Mat.
3. Make Mats to represent the shops.
4. Use Roamer Set Up Program to put shops in place.



Infant K1 Roamer Coding Pack

### Activity

#### 1. Start the Activity

1. Split into groups
2. Read of Hercules' Labour to get the belt
3. Link it to Roamer's task
4. Explain what they must get Roamer to do
  - a. Program Roamer to visit all the shops
  - b. Pause for 3 seconds at each shop to get a belt
  - c. Return to the start
5. Set the Learning Intentions and Success Criteria
  - a. Remember the way to write a program to solve a problem
  - b. When we can explain to people how to create programs



#### 2. 'Buy' the Accessories

1. Students should do the activity.
2. Monitor and support their progress.
  - a. Do not insist they follow the process developed in the pack.



#### 3. Write a Report

1. Tell the team they need to write a report about what they did.
2. Discuss the nature of the report.





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## Lesson Plan and Assessment

### Assessment

#### 1. Review the Reports

1. Each team presents their report to the class
2. Other teams ask questions
3. Ask the teams how they could improve their solution



#### 2. Complete Evaluation

1. Ask the students what they learnt
2. Did they achieve the success criteria?
3. Complete the online evaluation forms





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## Teacher's Notes

### Subject Comments

In this task students have the chance to show what they learnt from this package. They should:

1. Play Turtle.
2. Write an algorithm to solve a problem.
3. Write code for the algorithm.
4. Program Roamer.
5. Test the program.
6. Debug the program.

You should guide them, only if they run into problems, otherwise, let them make mistakes. The aim is to find out how much they have internalised the code producing process.

This is the first in the coding packs where the Roamer starts and finishes in the same place. It starts to prepare for Coding Pack 2.

### Prior Knowledge

Students should have worked through most of the other activities in this package.

### Classroom Tips

Using the Roamer to set up targets like the shops is a quick way of making sure they're placed where Roamer can land on them, and not near them.

### Training Links



Mats and Pathways: Target Mats -

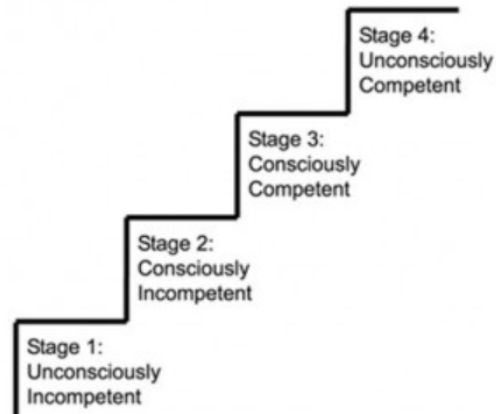


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## Teacher's Notes

### Science of Learning

The competence ladder shows how we travel from ignorance to expert. We should expect to see pupils sitting on the 'conscious – incompetence' step. This means that they will not follow or fully understand the code production process. Future tasks will give them more experience, improve their understanding and help them move up the ladder.



Infant K1 Roamer Coding Pack

### References and Useful Links

[The four stages of competence](#)



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## Resources

Infant K1 Roamer Coding Pack

### Resources for Roamer Activities

This page lists the resources needed for this Roamer Activity. Note that you will access some resources by following the hyperlink. Others you will find on the Activity pdf.



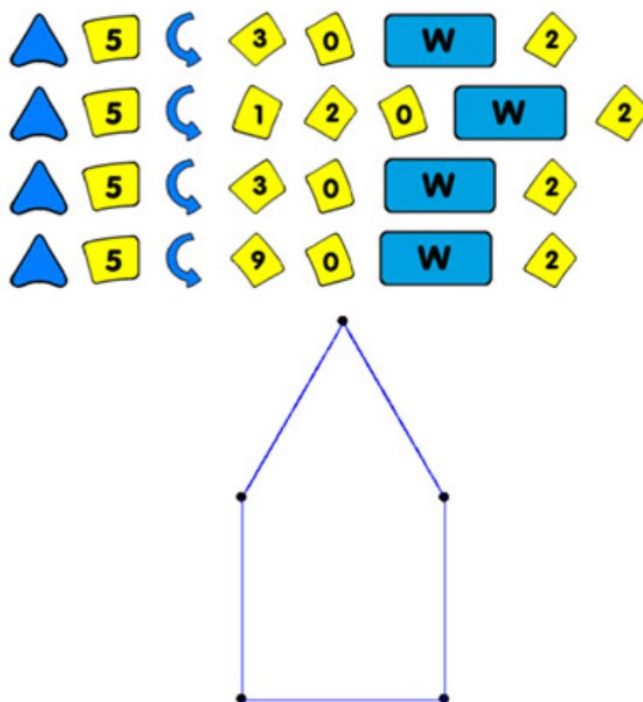
CD Users: Click on Link icon to access links.

### Roamer Products

- [1520-402 Infant K1 Roamer](#)
- [1522-108 Roamer Power Pack](#)
- [1522-110 Intelligent Charger](#)

### Teacher Materials

Use the following Set Up program to place the shops in a position as shown.



Note you can change the forward 5 to any length you want and the shape will remain the same.

### Other Resources



[Roamer Starter Mat](#)



[Mats and Pathways: Target Mats -](#)