

# COUNTING CONES



**DURATION**  
20 MINS

## LOCATION

School Grounds ✓  
Classroom X  
Sports Hall ✓  
Local Park ✓



## AIM OF ACTIVITY

Take note of the numbers written on each control as you visit them, add up all the numbers to get your answer.



## LEARNING OUTCOMES

Students will learn to follow a simple orienteering course. They will be able to orientate their map and recognise the start and finish symbols used in orienteering.

## INTRODUCTION

Counting Cones is a map orientation game. Pick a map and visit the controls on that map. Take note of the numbers written on the controls, add them up for your answer.

## SET UP/PREPARATION

Set out cones as shown in 'Set Up Map'. Using stickers, write out each cone's corresponding number and stick them to the cones.

## EQUIPMENT REQUIRED

- Counting Cones Set Up Map & Answers
- Counting Cones Course Maps
- 12 cones (3 red, 3 yellow, 3 green, 3 blue)
- Sticky labels for cones (number these as in 'Set Up Map')

## HOW TO PLAY

- Place students around blue end of course and distribute copies of the demo map
- Explain map orientation, start triangle and double circle for finish
- Check students have the map orientated
- Walk the route as shown on 'Demo Map', keeping map orientated
- Students can follow your route on their copy of map with their finger as you walk
- Next, give each student a course map
- Each student stands at their start, shown by the triangle on their map
- They are to follow the route on their course map from Start to Finish
- As they go, they add up the numbers on the cones as they pass
- When finished, the students should get their answers checked, then take a different map and try a different course
- The answer is the sum of all the controls on their course, including the start and finish

1	3	1
3	2	1
2	3	2
1	2	3

### Set Up Map

Answers:

Map 1 = 15  
Map 2 = 13  
Map 3 = 12  
Map 4 = 15  
Map 5 = 16  
Map 6 = 15  
Map 7 = 11  
Map 8 = 14



## VARIATIONS

1. **Timed runs:** spread Controls out over a larger area and do timed runs on courses.
2. **Create new courses:** using blank maps, get students to design courses for their teammates, let them compete and then check answers.
3. **Complicate it:** instead of just addition, use subtraction, multiplication or division as well as timing. If they're doing the exercise correctly, adding in some complication should still give positive results.
4. **Simplify it:** give a different value to each colour of cone (e.g. Blue is 1, Green is 2) and ask students just to add up the value of each Control, not the Start and Finish.
5. **Expand it:** Spread out the cones to increase the distance the students have to cover to complete the course.

1

1

1

**Set up as shown.**

2

2

2

## **ANSWERS**

**Map 1 = 11**

**Map 2 = 12**

**Map 3 = 13**

**Map 4 = 10**

**Map 5 = 12**

**Map 6 = 11**

1

1

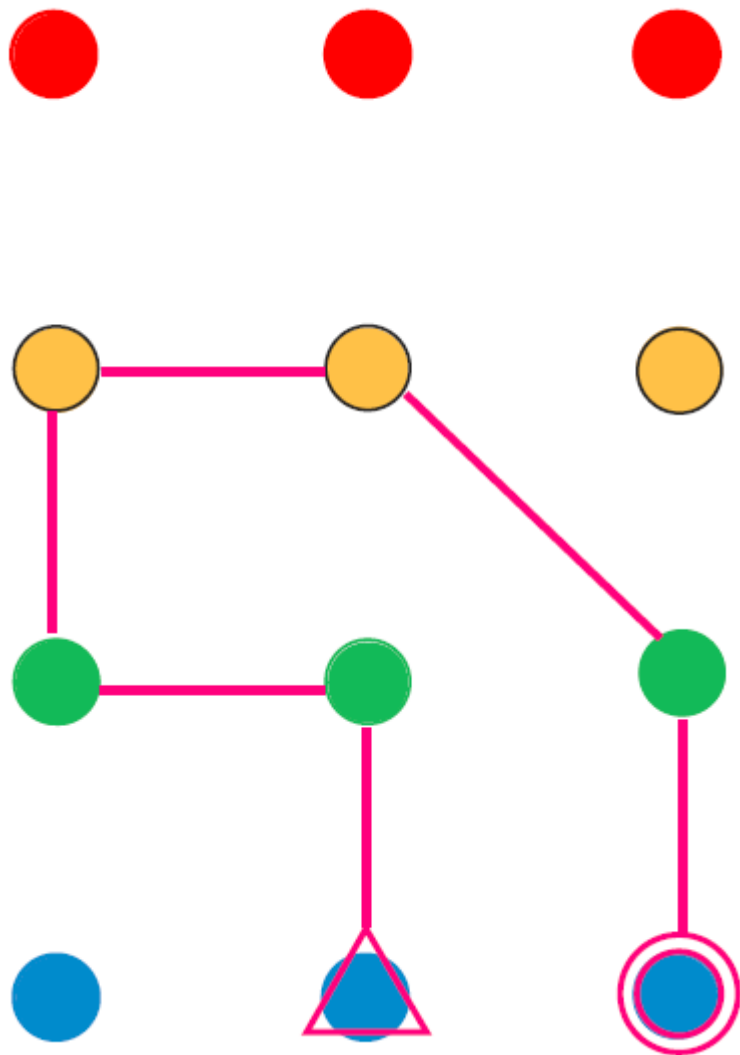
1

3

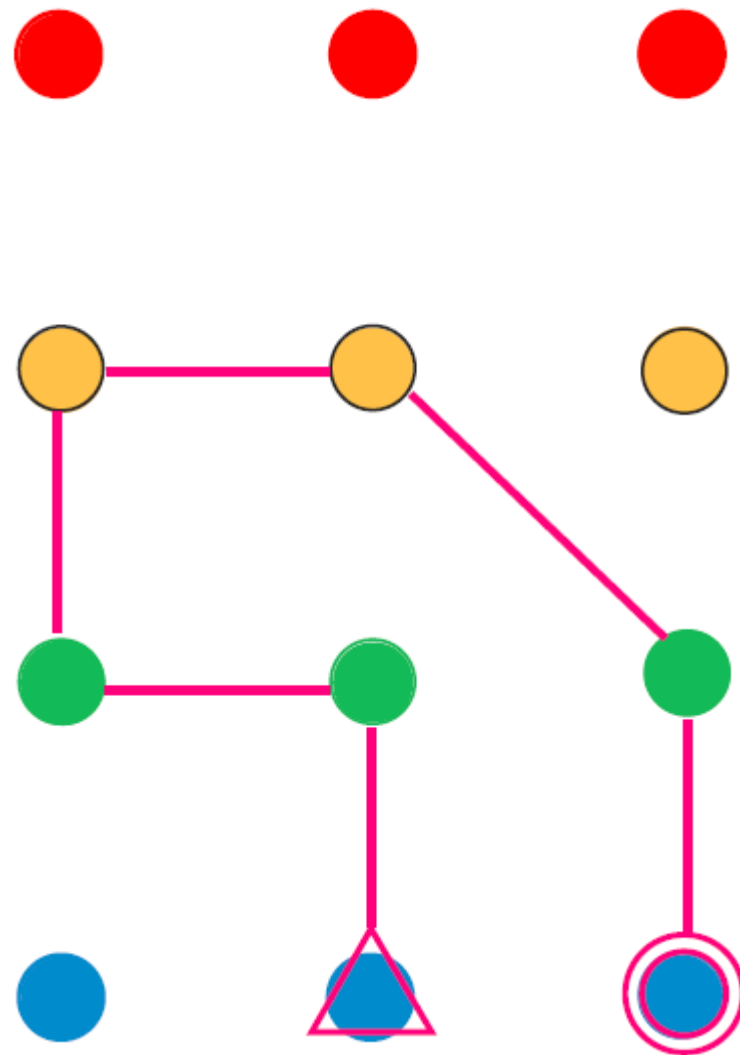
3

3

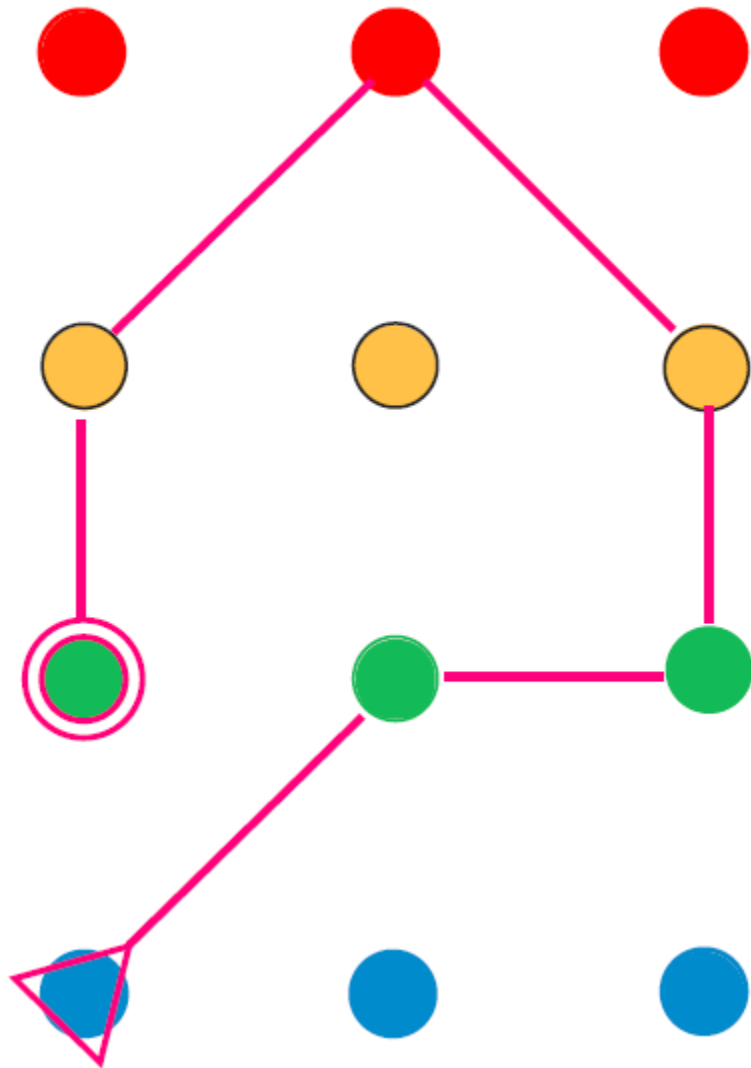
DEMO COURSE



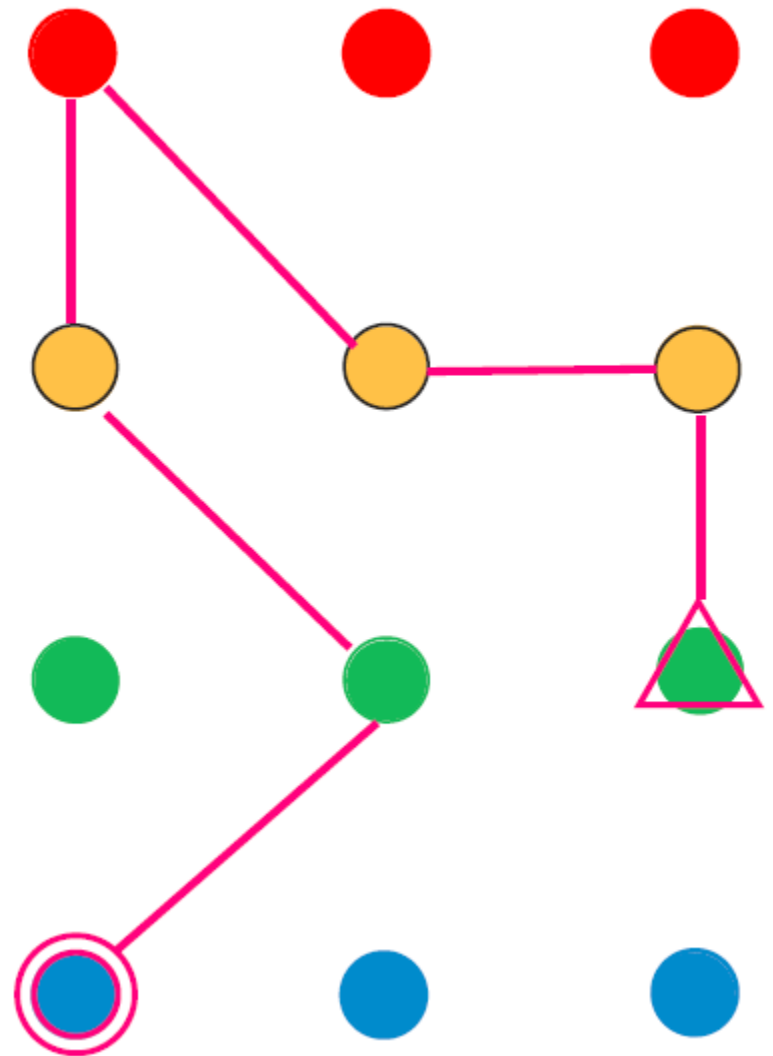
DEMO COURSE



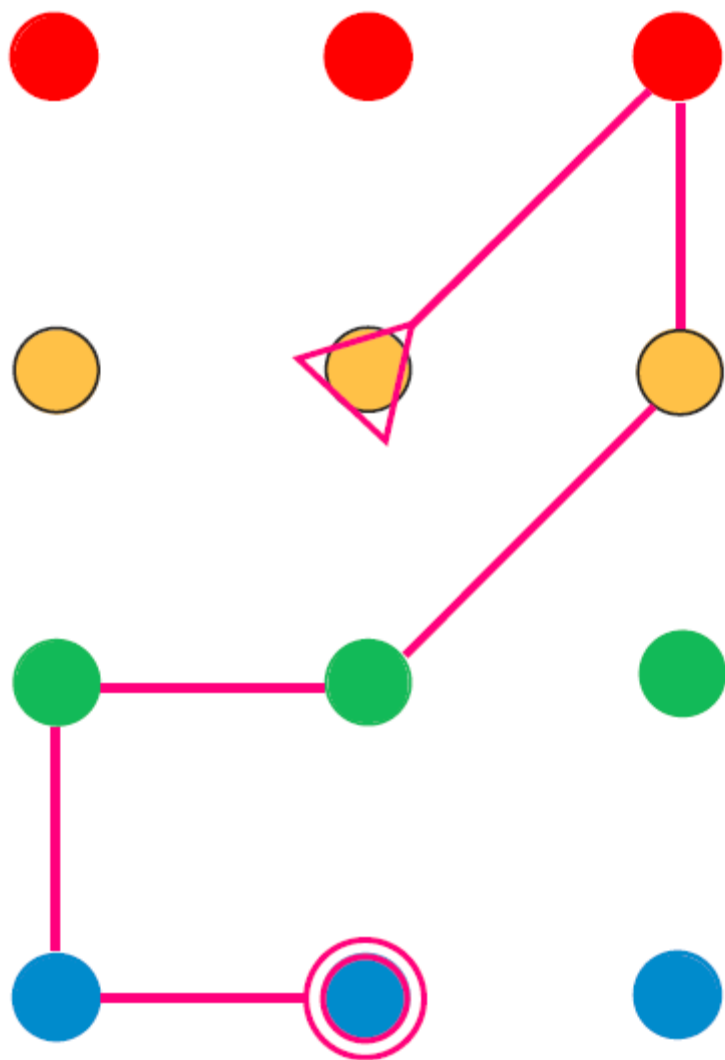
**MAP 1**



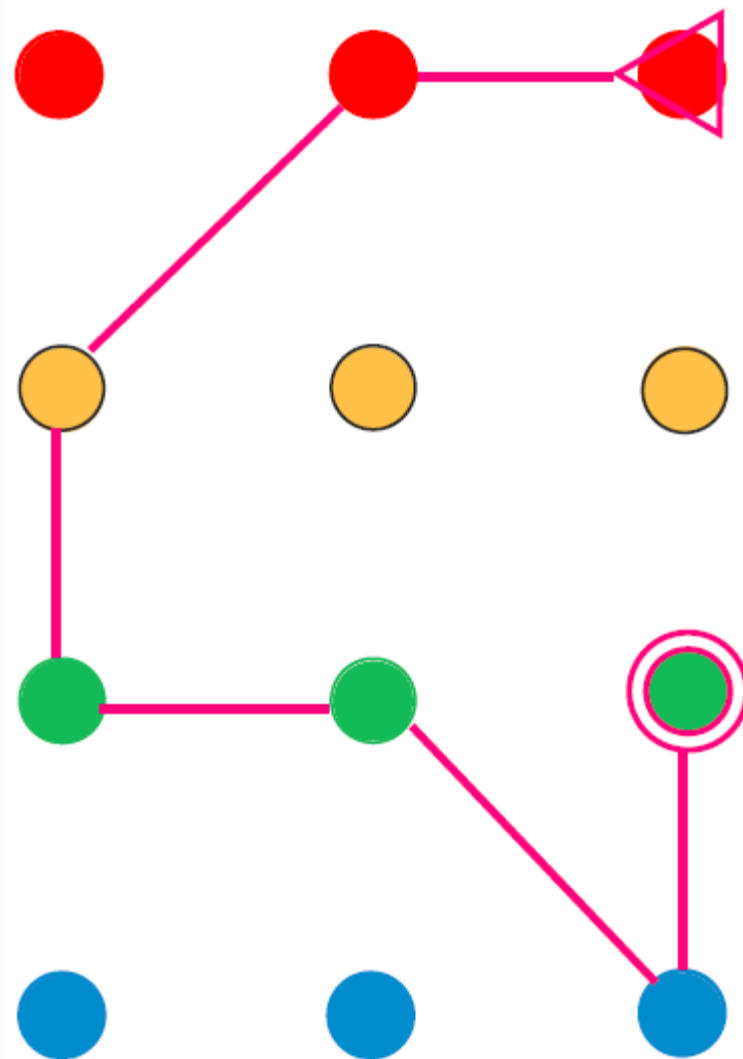
**MAP 2**



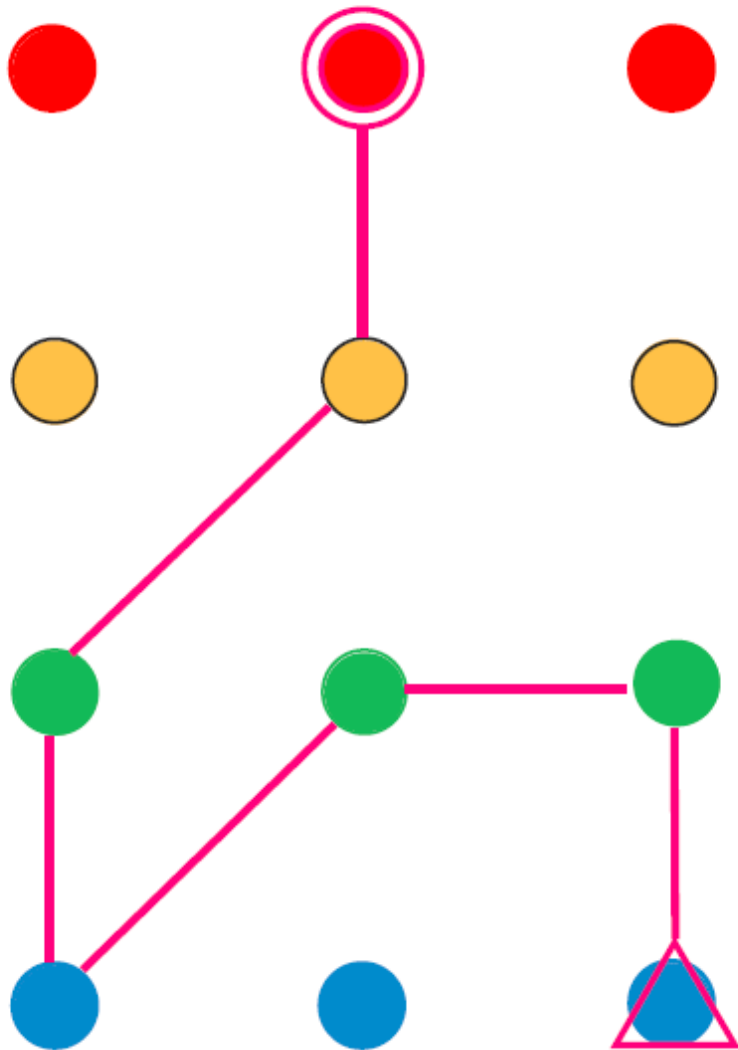
**MAP 3**



**MAP 4**



**MAP 5**



**MAP 6**

