Year 3 Maths
Steppingstone activity
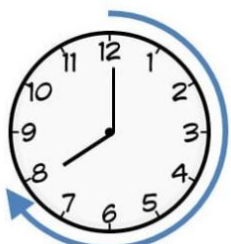
Lesson 16
LO: To give directions using turns

Success Criteria:

1. Choose a place to put some treasure (e.g. a message, toy, sweet) in your room or house.
2. Write instruction to direct someone to get there, using number of steps and type of turns.
3. Try out your instructions, make changes if you need to.
4. Read your instructions to someone in your family to try out. Did they get to the treasure?

Directions and turns can be used to explain a journey. Directions are instructions like 'three steps forward' or 'one step backwards'. These tell you how far to go.

Turns can be <u>clockwise</u> (the same way the hands on a clock move) or <u>anti-clockwise</u> (the opposite way to a clock's hands).
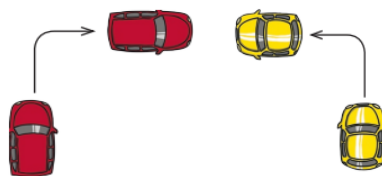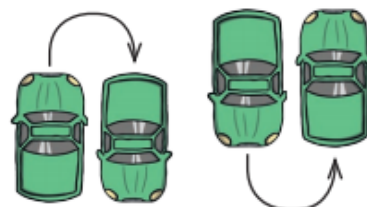
Clockwise   Anti-Clockwise

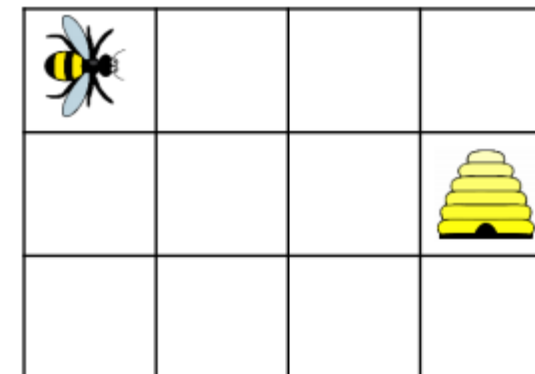You can turn a <u>quarter</u>,

A <u>half</u> turn

or <u>complete</u> turn - this would take you back to where you started.

Model:

To get the bee to the hive my instructions would be:

1. Take three steps forward.
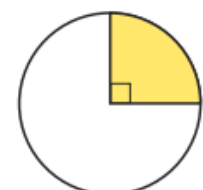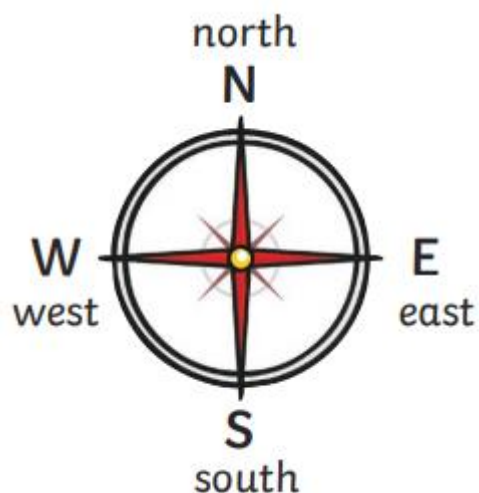2. Do a quarter turn clockwise
3. Take one step forward.
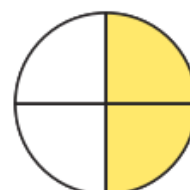
Year 3 Maths

Lesson 16
LO: To understand angles are measures of turns

Success Criteria: You can do this activity inside or outdoors

1. Label 4 walls/points e.g. North, South, East, West
2. Ask an adult to call out ¼ turn, ½ turn or ¾ turn and **clockwise** or **anticlockwise** (or make cards with the names of turns on so you can do it independently)
3. What turns do you need to make to visit all the points?

north
N

W   E
west   east

S
south
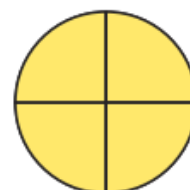
quarter turn   half turn

three-quarter turn   full turn
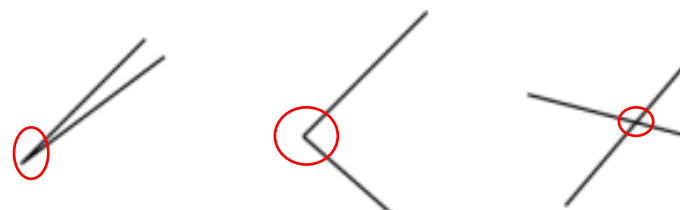
Starter activity:
Familiarise yourself with the different turns by trying the activity above. Then complete the main activities.

Angles are the measurements of a turn. An **angle** is created when two straight lines meet at a point.
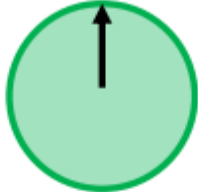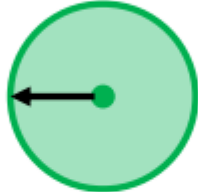
These all show examples of angles:

This does <u>not</u> show an example of an angle.

CANONBURY
PRIMARY SCHOOL
Create, discover and succeed together

Task 1	Task 2	Task 3
Practice	Reasoning	Problem **solving**

Task 1 — Practice

Look at the hands of the clock.
Begin by making the clock say 12 o'clock:

a) Turn the minute hand one quarter of a turn clockwise. Where is the large hand pointing?
What is the new time?

b) From there, turn the minute hand half a turn clockwise. Where is the large hand pointing?
What is the new time?

c) From there, turn the minute hand ¾ turn anticlockwise. Where is the large hand pointing?
What is the new time?

Don't forget to put the clock back to its correct time when you're done!

Task 2 — Reasoning

The arrow on a spinner started in this position.

After making a turn it ended in this position.

Jack says, The arrow has moved a quarter turn anti-clockwise.

Alex says, The arrow has moved a three-quarter turn clockwise.

Who do you agree with?

Task 3 — Problem solving

The letter 'X' has four angles.

Write your name in capital letters.
How many angles can you see in each letter?
How many angles are there in your full name?