

# How do cells send messages?

## Overview

When a cell gets infected with a virus, they need a way to warn other cells that something bad is happening! They do this by making proteins that act like warning signals. These signals can then alert neighbouring cells and nearby immune cells into action to increase the fight back against the virus.

## Activity

You can get an idea of how infected cells release warning signals by seeing what happens when you add hot water to sweets with a hard coloured shell...

### Step 1



Select 5 sweets of different colours

### Step 2



Arrange your sweets on a plate in a design

### Step 3



Pour hot water into a glass

### Step 4



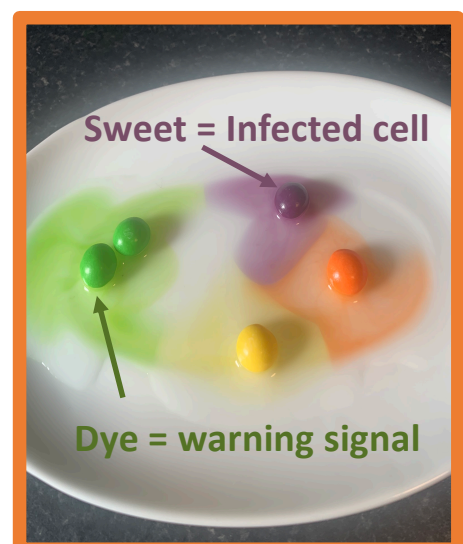
Add water to plate and watch what happens...

## What we learnt

The hot water hitting the sweets is like a virus first infecting your cells.

The coloured dye from the sweets separates out and moves towards the other sweets.

This is like the warning signals coming from the infected cell to warn others about the virus!





# How do cells send messages?

## List of Materials

- Packet of sweets with a hard coloured shell e.g., Skittles
- White plate
- Hot water
- A Glass
- Kitchen roll

## Length of time to complete activity

10 to 15 minutes

## Questions to prompt discussion

- What would happen if a cell could not send a warning signal to alert neighbouring cells?
- Can you think of any other examples where a cell may need to send out a signal to communicate with other cells?
- Do you think its possible for a cell to send out different types of signals?

