## Goal 16: Peace, Justice and Strong Institutions

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

People everywhere should feel safe as they live their lives. Everyone has individual rights such as the right to privacy and the right to freedom of expression.

World leaders are working together to promote and protect the human rights of everyone, and to find solutions to conflicts in our world.

We are now going to explore the importance of teamwork in nature by learning from the activities of bees.

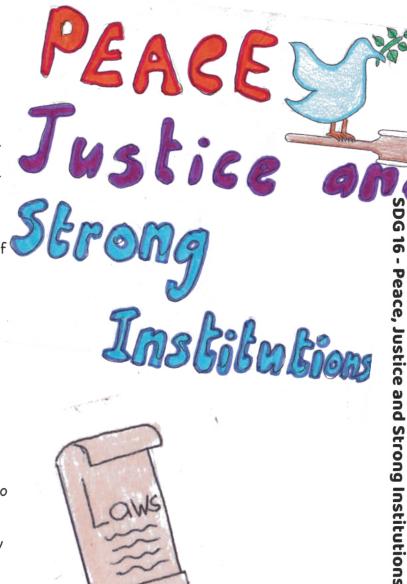
#### Bees teach us the importance of teamwork and communication

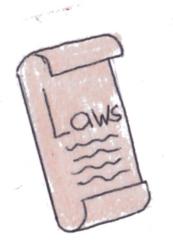
Bees are referred to as social insects because they live in large groups. They have developed many skills and roles to do so. One such skill is communication. They must communicate with each other to build their nests and hives, to protect each other, and to divide up the work that needs to be done.

Bees communicate by releasing chemicals called pheromones to send messages to each other. They can also communicate through dance!!

Some species of bees have a unique ability to protect the community when they are under attack from predators. They perform a synchronised flick of their wings to create a shimmering wave. It appears like the Mexican wave that you might have seen at some sporting or music events. This wave frightens predators and the community is protected.

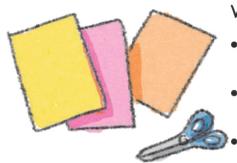
1. Effective means producing the effect that is wanted. 2. Accountable means being responsible for your actions and being able to explain why you did them. 3. Institutions are public organisations like schools, courts and hospitals. 4. Synchronised means to occur at the same time.







# Experiment - The Waggle Dance



#### What you need:

- A group of at least three people
- Some sheets of coloured paper
- A scissors



 Cut flower shapes out of the coloured paper. Make around 20 flowers.



2. Decide what job each member of the group will have. You need at least one scout bee, a waggle bee and at least one gathering bee.



The scout bee will hide the flowers in different places nearby.



4. The scout bee secretly tells the waggle bee where the flowers are hidden and how many there are.

## Waggle Dance Rules:

A waggle involves a figure of 8 movement with a waggle in the middle.

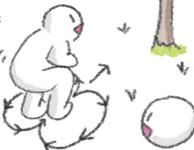
Students waggle towards a flower to show direction.

The number of waggles will indicate the distance to the flower. For example 1-step is 1-waggle.

The pace of waggle tells you how many flowers are present. For example, slow is 1 flower and very fast is 5 or more flowers.

For an added challenge you can time each group to see who is the fastest at gathering the flowers!

5. The waggle bee tells the gathering bee where the flowers are using the waggle dance rules above.



### What are your thoughts?

Have you learned something new about teamwork from the world of bees?

What would you do to ensure we have a peaceful world?

## What Do We Learn From This Experiment?



#### The Waggle Dance

The waggle dance of the honeybee has been studied by humans for over 100 years. It is used by one bee to communicate a lot of information to another bee. It is a complicated dance. Did you find it difficult to learn?

Scientists have noted that bees learn the dance much better by watching an older bee perform it. Did you find it easier to learn the dance by reading instructions or by watching someone dance?

The waggle dance is performed by a scout bee and watched by the other bees. It requires the bees to work together to share information and collect food for the hive. Did your team work well together? Did you find the flowers?

Did you know that the waggle dance is so important that Karl von Frisch, an Austrian scientist who first described the dance, won a Nobel Prize in 1973 for his work.



## What Can We Do?



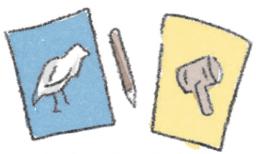
Be kind to your friends, classmates, and family.



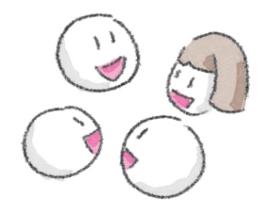
Learn about your rights and responsibilities.

SDG 16 is all about promoting peaceful and inclusive societies for sustainable development, providing access to justice for all and building effective, accountable and inclusive institutions at all levels.

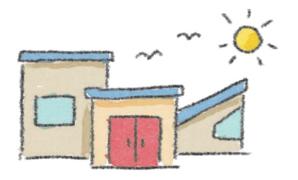
It can be hard to know the things we can do in our lives to make a difference, but by following some of the tips on this page we can start making the world better for everyone. You may not think that little changes will make a difference, but everyone making little changes adds up to big change.



Create posters that raise awareness about the importance of human rights.



Participate in activities that include everyone.



Be part of a peaceful environment at school.