#### Year 4 Writing Challenge 11 The Artist



1. Answer the Talking Picture Questions

#### **Talking Pictures**

George is an artist. What will George do with the ship now that it has magically appeared?

'He loved this moment, seeing his creations come to life'.

What other drawings might George have done in the past? Where are they now? What do you think George's magic word was to make the picture come to life?

#### If you could draw anything (knowing it would come to life) what would you draw?

2. Take the Writing Challenge - use the starter sentence to begin your story.

#### Writing Challenge

Imagine you have George's powers. Can you draw something that you'd like to come to life and then write about what happened next?

He had been working on the drawing for hours, locked away in complete silence in his study, letting his imagination run wild. The only sound that could be heard was the soothing scratching of his pencil on the textured paper.

#### Spelling Year3/4 Word List

The following words are from the Year 3/4 spelling list. Use some of the different strategies we discussed at the beginning of the year to learn how to spell the word – pyramid, diamond, mnemonics, pictures etc and write an extended sentence to include each word. You could then try the Growth Mindset Challenge. Give it a go!

Growth Mindset Challenge - Can you write a story that includes all the words? SET 10 build earth heart notice purpose thought



# **Sound and Animals**

As humans, we are able to hear sounds that have frequencies between 20 Hz and 20,000 Hz. That is quite a range! Amazingly, there are animals that are able to hear even better than us!

## **Bats and Moths**

Scientists agree the animal (insects are a part of the animal kingdom) with the best hearing is the moth! A moth can hear frequencies even higher than bats. This is an evolutionary advantage because bats are moths' predators. Bats also have a large range of hearing perhaps to make up for their poor vision. They rely on their hearing to echolocate their prey.

# **Dolphins**

Dolphins, similar to bats, use echolocation to travel. They also use echolocation to locate prey and communicate with one another. They can hear sounds from 150 Hz to 150,000 Hz, and make sounds from 75 Hz to 150,000 Hz.

#### Horses

Horses hear a large range of frequencies, from 55 Hz to 33,000 Hz. Scientists believe this amazing sense of hearing enables horses to listen for predators. It also helps them listen for other dangers so they can warn their herd members and find safety.

# Owls

Owls can hear sound frequencies from 200 Hz to 12,000 Hz. Also, their ears are uniquely structured. One ear sits further back while one ear is lower on the head than the other. Scientists believe this helps owls hear their prey more effectively. Since owls hunt in the dark, their keen sense of hearing aids in their survival.







#### **Sound and Animals**

### Elephants

Elephants can hear infrasound or sounds that have a lower frequency than human ears can detect. Their range of hearing is from 16 Hz to 12,000 Hz. Their amazing sense of hearing allows them to communicate with each other and be aware of any dangers in their environment.

# **Dogs and Cats**

Dogs and cats can hear ultrasound or sounds that have a higher frequency than human ears can detect. These ultrasounds aid cats in hunting. Interestingly, when humans are training their dogs, they often use dog training whistles which emit ultrasound. These whistles do not disturb humans but do alert their dogs.

### Pigeons

Pigeons can hear infrasound which allows them to hear disturbances in their environment, including natural disasters. This sense has helped pigeons to be among the best navigators in the world.









# Questions

- 1. What pair of predator and prey have incredible hearing capacity?
  - O bats and moths
  - snakes and mice
  - dogs and cats
  - $\bigcirc$  birds and grasshoppers
- 2. Which two animals are able to hear infrasound?
  - O bats and moths
  - dogs and cats
  - elephants and pigeons
  - $\bigcirc$  horses and dolphins
- 3. What unique adaptation do owls have to enable them to be efficient predators?
  - O ability to hear ultrasound
  - ability to hear infrasound
  - non-symmetrical placement of ears
  - O strong wings
- 4. Which animal (of those listed) can hear the highest frequencies?
  - O dogs
  - dolphins
  - O owls
  - O horses
- 5. Why is it important for horses to be able to hear a large range of frequencies?
- 6. How does the ability to hear infrasound allow pigeons to be among the best navigators in the world?







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Answers will vary. A possible answer is: It is important for horses to hear a range of frequencies so they can alert their herd of danger.

6. How does the ability to hear infrasound allow pigeons to be among the best navigators in the world?

Answers will vary. A possible answer is: The ability to hear infrasound allow pigeons to hear natural disasters and avoid them.



