Year 4 Reading Activities

Our topic is The Aztecs, so I would like you to read about the Aztecs on Purple Mash, it is set as a 2do and looks like this:

When you have read this, there is a reading comprehension activity for you to do.

You need to very carefully read the recipe and the instructions for making a Mexican Bean Burger then answer the questions. This can be found on the next page.

You will also find a reading comprehension about Soundwaves, which is our Science focus this half term.

Mexican Bean Burger Recipe

Bean Burgers are a typical Mexican dish. They are healthy and don't have as much fat in them as burgers made from meat. They are packed with goodness and really yummy!

Ingredients

Bean Burger:

2 400g cans of kidney beans (rinsed and drained)

100g of breadcrumbs

2 tsp of mild chilli powder

Coriander (chopped leaves)

1 egg

200g of fresh salsa

150ml of low-fat natural yoghurt

Juice of half a lime

Optional: salt and pepper

Served with:

Six wholemeal burger buns

Your choice of salad, such as lettuce and tomato

Equipment

2 large bowls

A potato masher

A fork

A baking tray

A grill (to be used with help from an adult)

Hot! Hot! Hot!

Did You Know...?

Mexican food is often fiery with lots of spicy chillies!

Nothing New!

Did You Know...?

Mexican food dates back 9,000 years to the Maya people!

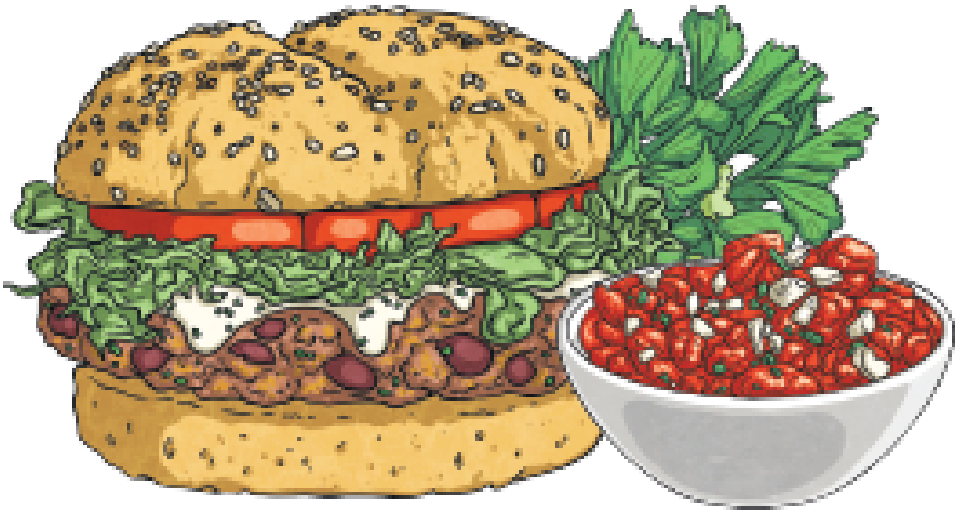
Mexican Bean Burger Recipe

Method

1. Place the kidney beans into a large bowl and mash them with a potato masher.
2. Tip the breadcrumbs, chilli powder, egg, salsa and half of the coriander leaves into the bowl with the mashed kidney beans.
3. Add salt and pepper if you like, then mix everything together using a fork.
4. Now, wet your hands. Use your fingers to shape the mixture into six burgers.
5. Slide the burgers onto a non-stick baking tray.
6. With an adult's help, turn on the grill to a medium heat.
7. Grill the burgers for 4-5 minutes on each side.
8. Once cooked, place the Bean Burgers onto buns and add the sauce you have made.
9. Serve with salad.
10. Time to eat! Enjoy your delicious Mexican Bean Burger!

Mexican Bean Burger Sauce

While the burgers are cooking, mix the remaining coriander leaves, yoghurt and lime juice together in a separate bowl.



Questions

1. What are Mexican Bean Burgers packed with? Tick **one**.

   - ○ fat
   - ○ meat
   - ○ goodness
   - ○ badness

2. What makes Mexican food fiery sometimes?

   _____

3. Only two of the following ingredients are correct. Tick the **two** that are correct.

   - ○ 6 400g cans of baked beans (rinsed and drained)
   - ○ 100g of breadcrumbs
   - ○ 2 tsp of mild chilli powder
   - ○ 4 eggs

4. Number these steps to show the order that they should happen in. The first one has been done for you.

   - ☐ With an adult's help, turn on the grill.
   - ☐ Use your fingers to shape the mixture into six burgers.
   - ☐ 1 Place the kidney beans into a large bowl.
   - ☐ Add salt and pepper if you like.
   - ☐ Enjoy your delicious Mexican Bean Burger!

5. What should you do while the burgers are cooking?

   _____

6. Draw a line to join the food with the amount needed in the recipe.

lime	200g
fresh salsa	150ml
low-fat yoghurt	juice of half

7. Which part of the instructions do you think you would enjoy the most? Explain your answer.

   _____

   _____

Sound Waves

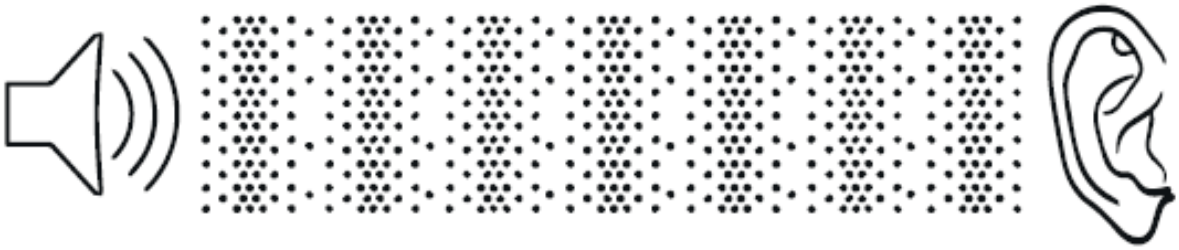
Sound is all around us. We can hear a bird in a tree, your Mum shouting upstairs, "Hurry up – we're late!" and we can listen to our favourite songs and music.

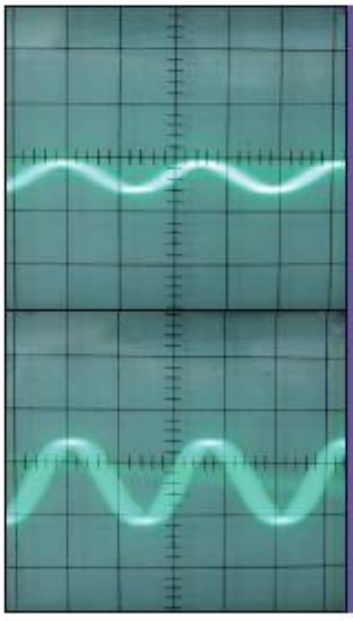
These are all different types of sounds but they have one thing in common… They all travel to your ear as sound waves.

Catching the Wave:

Sound waves are vibrations (little wobbles) that move the air, in the same way that the wind moves the water in the sea to make waves. The waves travel towards your ear as the air particles move the next door particles until they arrive at your ear.

How do the sound waves know how to get to your ear? Well, the answer is, they don't…The sound waves travel in lots of different directions from where the sound is made and your ear catches the bit that comes in your direction. Once your ear has 'caught' the sound, it carries on vibrating the tiny bones inside your ear which turn the vibrations into electric pulses that are sent to the brain.





Did you know?

Volume of a jet engine: 150dB

Loudest place to work: Driving a Formula One car (140dB)

Highest audible pitch a human can hear: 20,000Hz

Highest audible pitch a bat can hear: 90,000 Hz

Smallest bone in your body: The stapes/stirrup bone in your ear measuring 2.6 - 3.4mm

Speed of sound: 340 m/s in air but 1484 m/s in water

Pitch:

The pitch of a sound is how high or low it sounds. This depends on how quickly the source of the sound vibrates. This is called the frequency of the sound and this is measured in hertz (Hz). The faster the vibration, the higher the frequency and the higher the pitch of the note. A low note will have a slow vibration and a lower frequency. You can make a string on an instrument have a higher frequency by shortening the string or making it tighter.

Volume:

Volume is how loud a sound is, no matter how high or low the pitch of the note. It is measured in decibels (dB). The volume is how hard the particles in the air are hitting each other, a bit like how hard you hit a rounders ball. Hit the particles hard and they will be louder and the sound will travel further just like your rounders ball. So to make a guitar string louder, but the same pitch, you pluck it with more force.

Questions About Sound Waves

1. What vibrates inside your ear to send the sound signals into your body?

2. What unit is pitch measured in?

3. What unit is volume measured in?

4. What is another name for the stirrup bone inside your ear?

5. What is the speed of sound in air?

6. Can bats hear higher pitched noises than humans?

7. How would you play a guitar string louder?

8. Why has the author put **(little wobbles)** in brackets next to the word 'vibrations' in the first sentence?

9. Sound needs air or other particles to move for it to work. In space there is a vacuum and no particles... do you think we can hear sound in space?

10. Thinking about noise levels, what safety kit does a Formula One driver need?