



Gather your friends and family on screen and get in touch with your senses to help raise life-changing funds for children and adults with complex disabilities!





Holding a virtual quiz is a great way to stay connected, have some fun and get your friends and family supporting your fundraising for a fantastic cause!

In this Sense Quiz Night starter pack, you've got four question rounds to test everyone's sensory knowledge. Plus a Sense Quiz Night banner to help promote your event and winner's certificate. Oh, and the answer sheet, of course.

- Pick a platform There are several to choose from, you probably already know some of them. Google Hangouts, Zoom, Facebook Live and new apps are popping up all over the place.
- Spread the word Invite your friends, family and workmates by setting up a Facebook event or getting them together on WhatsApp and telling them how to get involved.
- Add your own rounds Why not add your own music round or get guessing at some mystery voices?
- Prizes Think about what the prize will be. A collective cheer? Our Sense Quiz Winner certificate? A virtual voucher?
- **Cash for questions** Ask people to pay-to-play in advance or during the quiz. Maybe £2 per person or £10 a team. Virtual makes it easy to (gently) nag people with your fundraising page link!







@senseeventsteam







Round 1 - Senses

- Name the five main senses (1 point)
- Which of our five best known senses is the first to develop? (a) Touch, (b) Taste, (c) Smell, (d) Sight or (e) Sound
- Where in the body would you find a photoreceptor?
- Scientists have demonstrated that we have more than 5 senses. Roughly how many do they now believe we have? (a) 9, (b) 15, (c) 20, (d) 29
- What feeling do your nociceptors detect? What is nociception for?
- Which sense is responsible for the spiciness of 'hot' foods? (a) Taste, (b) Smell, (c) Touch, (d) Sound, (e) Sight
- Deposits of the metal element "ferric iron" in our noses are thought to help us detect what?
- 8. The Doppler Effect refers to a phenomenon experienced with which senses? (a) Sight/Sound, (b) Taste/Smell, (c) Touch/Sound, (d) Sight/Taste
- Everyone is partially blind in both of their eyes, true or false?
- 10. We make sense of ourselves and the world around us using all our senses. But for most people, the information we take in comes mainly through our ears and eyes. What is the estimated proportion?

(a) 75%, (b) 80%, (c) 90%, (d) 95%

# Round 2 - Smell and Sound

- 1. True or False you can't smell in your sleep?
- What is the condition called where people cannot smell?(a) Anosmia, (b) Phantosmia, (c) Parosmia, (d) Fart-Freemia
- Who has a better sense of smell?(a) Men, (b) Women, (c) No difference
- 4. How frequently do you get a new nose (in terms of brand-new scent cells?
  (a) Every 1-2 days (b) Every 1-2 weeks, (c) Every 1-2 months,
  (d) Every 1-2 years, (e) Never
- 5. Studies have shown that our sense of smell can distinguish genetic similarity, influencing our choice of romantic partner. Are you more attracted to someone who has...
  - (a) Different genes to you, or (b) Similar genes to you?
- 6. Besides hearing, what other important function do your ears perform?
- 7. What is tinnitus?
- 8. In research, approximately what proportion of people said that they believe their employment opportunities are limited because of their hearing loss?

  (a) 0%, (b) 25%, (c) 50%, (d) 75%
- 9. In the early stages of human pregnancy, the tiny bones of the inner ear initially form as a structure with a function that humans long ago are thought to have evolved out of. What is it? (Think about where they are and what our ancient evolutionary ancestors might have had.)
- **10.** If a tree falls in the forest and no one (or thing) is around to hear it, does it still make a sound?





- 1. Who typically has a better sense of touch, men or women?
- Why do our fingers and toes go wrinkly in the bath/shower?(a) Water leaving the skin, (b) Water absorbed into the skin,(c) To stop your feet smelling, (d) To help you grip wet objects
- Which part of your body is the least sensitive?(a) Chest, (b) Back, (c) Thigh, (d) Bottom
- 4. How many nerve endings for touch are there in the tip of each finger? (a) 100, (b) 1000, (c) 3000 (d) 5000
- What percentage of the time can most people communicate an emotion through touch alone according to research? Emotions include anger, fear, disgust, love, gratitude, sympathy, happiness and sadness.

  (a) 10%, (b) 25%, (c) 50%, (d) 100%
- 6. Name the five main flavours. (5 points!)
- 7. How long is the average tongue?(a) 5.5cm, (b) 7.6cm, (c) 8.4cm, (d) 9.3cm
- 8. True or False The taste of sweet foods is diminished when on an airplane.
- 9. True or False The taste of savoury foods is enhanced when on an airplane.



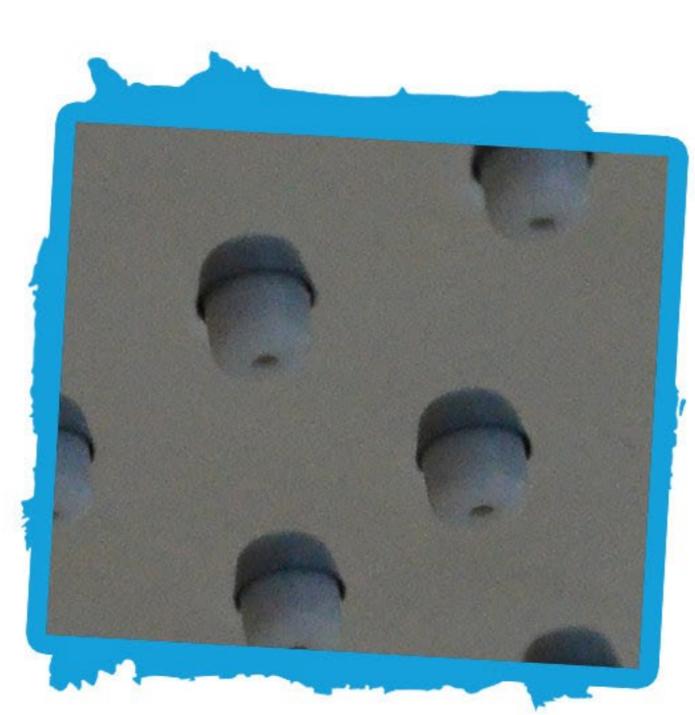
# Name the Object!

Picture Round

#### Team Name.....

Can you guess what objects these close ups are from?





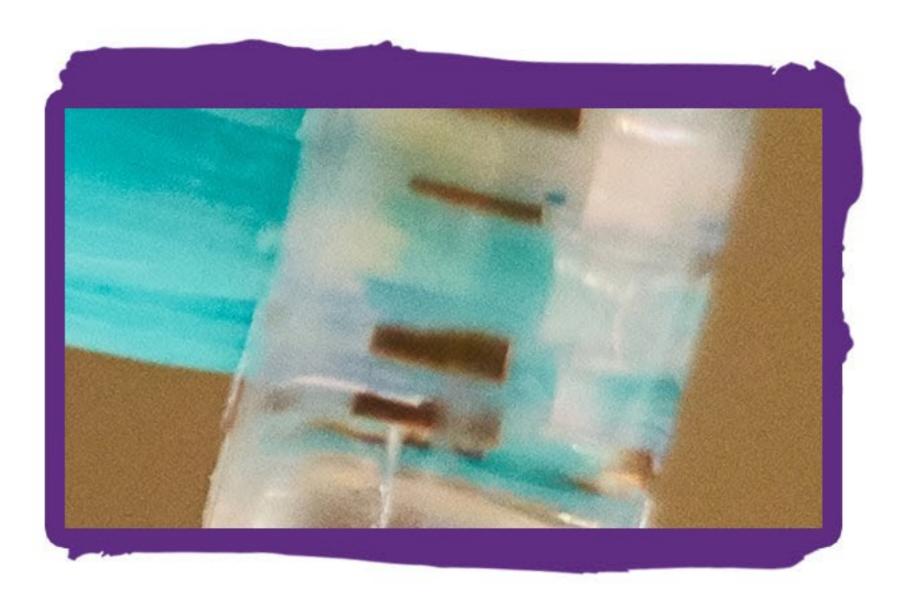


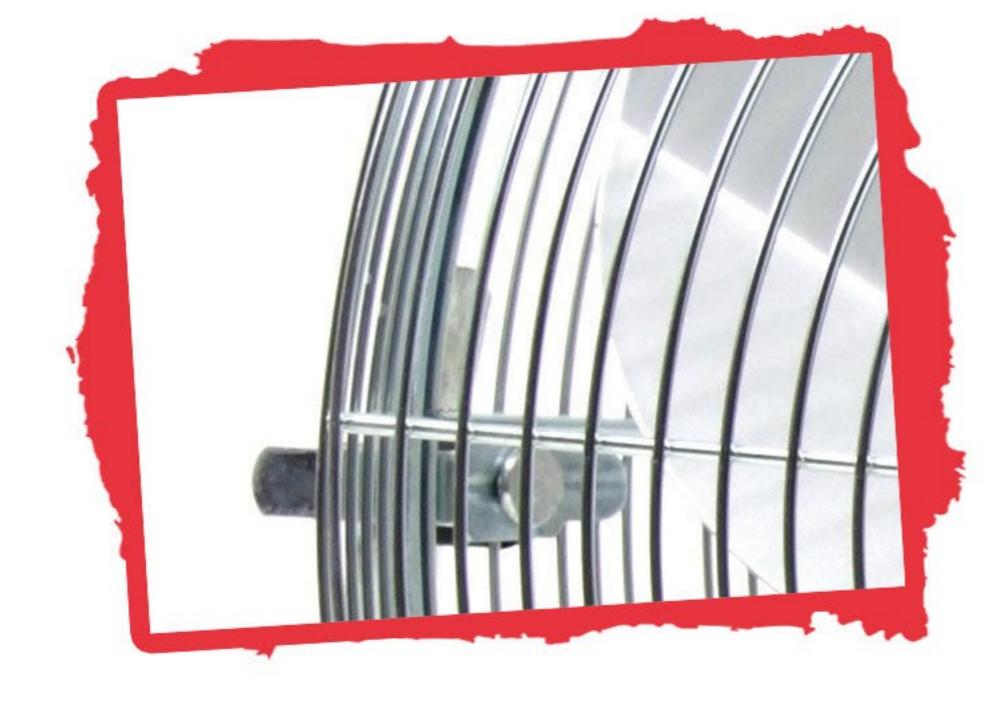










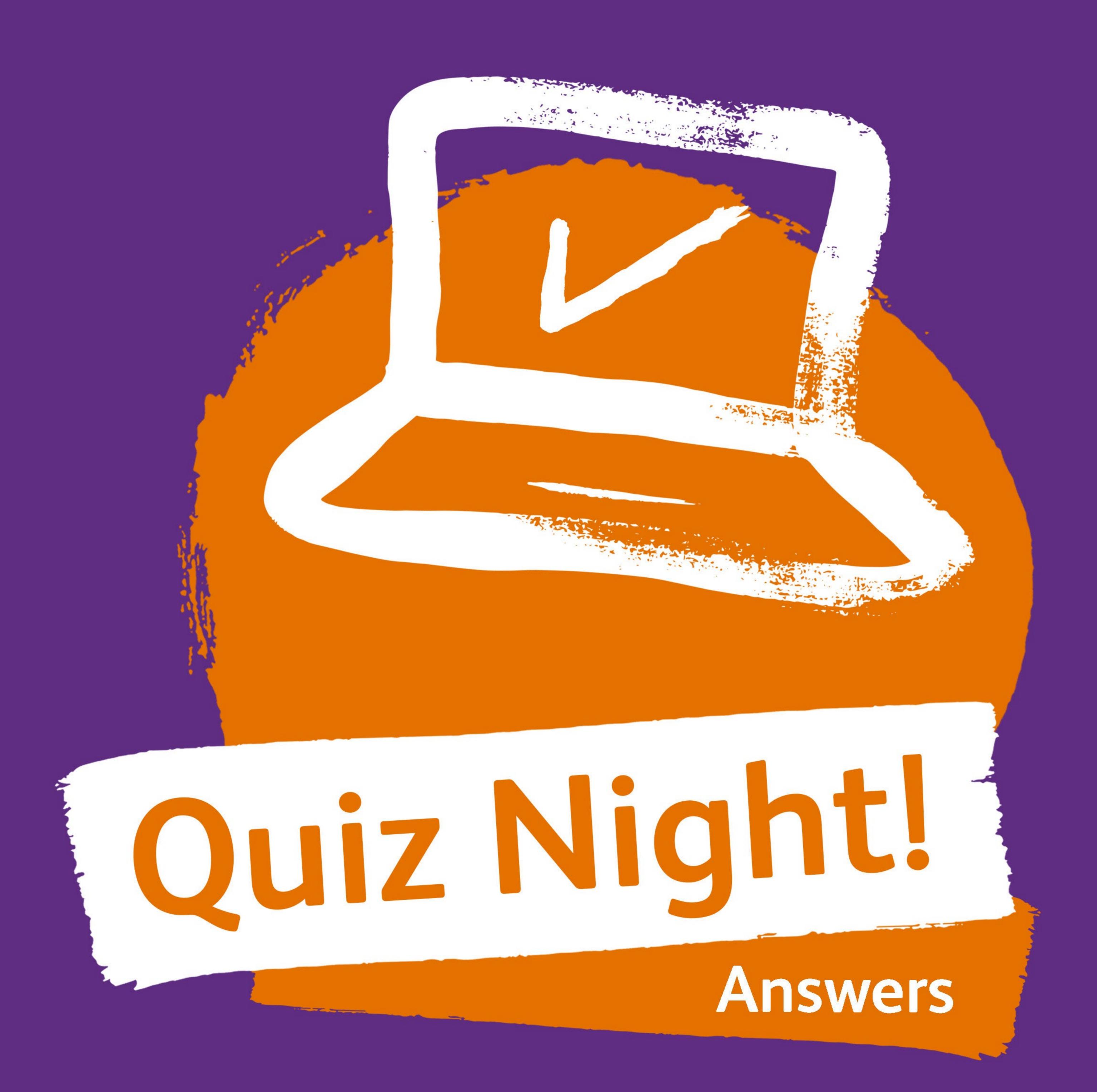














#### Answer sheet

### Round 1 - Senses

- 1. Touch, Taste, Smell, Sight and Sound
- 2. (c) Smell it is fully formed, even before we are born.
- 3. The eyes photoreceptors detect different frequencies of light, giving us the ability to see.
- **4. (d) 29** although there is still disagreement and the answer ranges between 25 and 33, including things like thermoception (temperature), proprioception (knowing where your body is) and Itching (which is surprisingly a different sensory system to touch!) Believe it or not we also have an innate sense for time, particularly when younger!
- 5. Pain nociceptors are your pain receptors
- 6. (c) Touch the heat from chillis/spice is not actually a 'flavour' that is detected. It is actually a chemical burn on the touch receptors in your mouth. Your touch receptors are also responsible for the coolness of mint.
- 7. Magnetic fields Humans aren't very good at this, but have been found to sense magnetic fields in a small way. Most birds strongly rely on magnetoception to navigate. That's how birds are able to fly so directly between locations they are following the earth's magnetic field.
- 8. Sight/Sound the doppler effect describes something that happens with waves, like sound wave and light waves. The best practical example of this effect is when a car drives past at speed, it makes a noise. When the sound is further away it sounds lower in pitch, as it gets closer it sounds like a higher pitch. The sound itself is not changing, only your position relative to where it is coming from. Fans of The Big Bang Theory may remember that Sheldon goes to a fancy dress party dressed as The Doppler Effect.
- **9. True** at the back of your eye where the optic nerve leaves to take information into the brain there are no photoreceptors. The only reason that you don't see a gaping hole in space when you close one of your eyes is that your brain fills in the gaps by guessing based on what's around it. This is remarkable because it demonstrates quite how much of what we perceive is invented via interpretation by the brain.
- **10.** (d) **95%** this is why the work of organisations like Sense is so vital, helping people who are deafblind or have other complex disabilities use all the senses they have to communicate and experience the world.

#### Answer sheet

# Round 2 - Smell and Sound

- 1. True when you are asleep your sense of smell shuts down. Although it may be one of the first things you notice upon waking up, depending upon the smell!
- 2. (a) Anosmia b is smelling things that aren't there, c is getting smells wrong and d is utterly made up.
- 3. Women due to a more developed orbital prefrontal region of the brain, which may have evolved to help them discern the best possible mates.
- 4. (b) Every 1-2 months in fact, your sense of smell is the only cranial nerve (nerve emerging from the brain and control bodily functions like eye movement, hearing, taste and vision) that can regenerate says Luong.
- 5. (a) Different Body odour is largely influenced by Major Histocompatibility Complex (MHC) molecules, which are genetically determined and linked with the immune system. Experiments on both humans and animals has shown that we tend to judge potential romantic partners as more attractive if their MHC composition is significantly different from our own. The theory is that this creates greater variation in our immunity, making our offspring more resistant to disease.
- **6. Balance** fluid in your inner ear helps your body to recognise when it is stable and what position the body is in. Motion sickness and conditions like vertigo are caused when this function is disrupted or confused in some way.
- 7. A condition where sufferers can hear a constant ringing/whirring/static sound. In most cases this is purely subjective to the person. But in rare instances, it can be heard by the person examining them due to physical effects like the spasm of muscle in the inner ear.
- **8. (d) 75%** there are at least 4.4 million people of working age who suffer from hearing loss in the UK alone.
- 9. Gills
- 10. (a) Yes disagreements on this are based on how people choose to define "sound". Does a vibrational wave of energy have to be perceived by something before we can call it sound? Is essentially the dilemma. According to both physicists and the Oxford English Dictionary, sound is defined as: "vibrations that travel through the air or another medium and can be heard when they reach a person's or animal's ear". So it doesn't have to be heard in order to be sound, it must just be possible. Physicists argue that the underlying information is still present, whether or not it is perceived by something conscious.

#### Answer sheet

# Round 3 - Touch and Taste

- 1. Women this is thought to be because they generally have smaller fingers and therefore more closely spaced nerve endings.
- 2. (d) To help you grip wet objects Scientists used to think it was water being absorbed into the skin, but it turns out our nervous system controls this function by constricting blood vessels under our skin. This creates greater surface tension for gripping wet objects.
- 3. (c) Back
- **4. (d) 3,000** the fingers, along with the tongue and lips are your most sensitive body parts. Despite the torso being much larger, the entire thing has about as many touch receptors as one tiny fingertip.
- 5. (c) Slightly more than 50% of the time
- 6. Sweet, Salty, Bitter, Sour and Umami
- 7. (b) 7.6cm (3 inches) the world's longest tongue was Nick Stoerberl at 10.1cm (3.97 inches).
- 8. True Sweet receptors are suppressed when on an airplane.
- **9. True** Your umami receptors are enhanced. A rather strange consequence was one German airline Lufthansa confirming that passengers ordered nearly as much tomato juice as beer.
- 10. (b) 25% if you're a picky eater you may have an excuse. A quarter of people have extra papillae on their tongue, which means they have a greater number of taste buds and thus more specific taste.

# Name the Object!

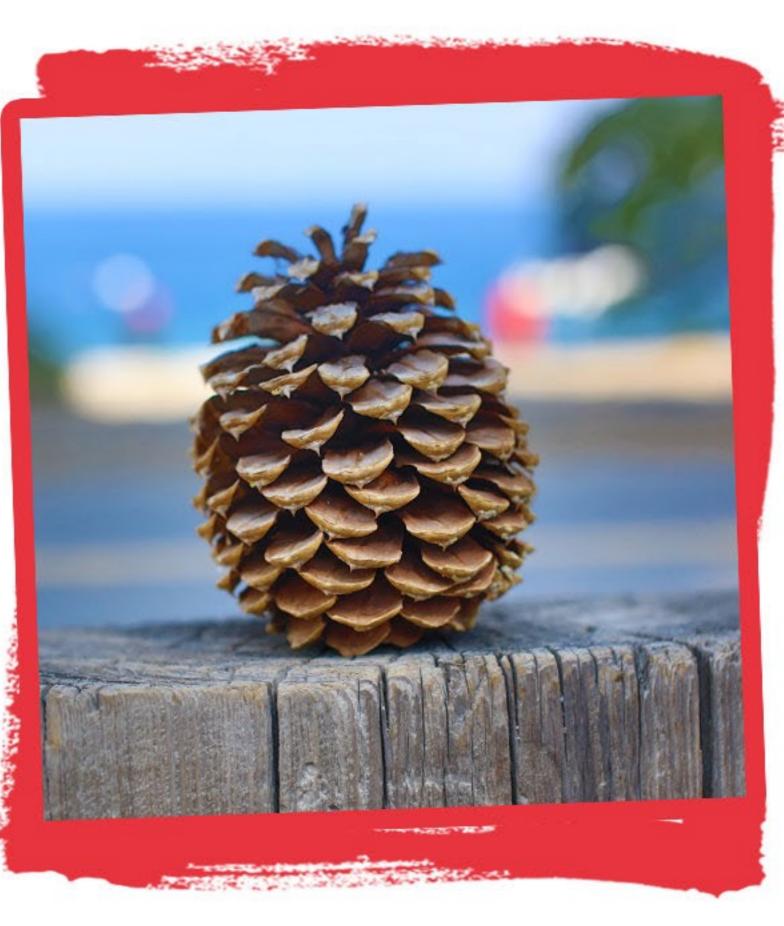
Picture round answers

How did you do?









1) Stapler

2) Showerhead

3) Table tennis bat

4) Pinecone







6) Fork



7) Toothbrush



8) Fan



9) Lighter



10) Ice cream cone