

# THE SCIENCE OF SENSE



## TOUCH

Our sense of touch puts us in immediate contact with the world. When we touch something sensors in our skin send signals to our brain to decide what it is. Our sense of touch allows us to tell if something is hot or cold, dull or sharp, rough or smooth, wet or dry. The most sensitive parts of our skin have the most touch receptors in them. Our fingertips, lips and toes are all very sensitive to touch.

### WORD SEARCH

SOFT	COLD	HAND	TICKLE							
TEXTURE	ITCH	EPIDERMIS	HYPODERMIS							
PAIN	ICE	HOT	TOUCH							
W	N	R	S	L	S	O	F	T	O	T
Q	T	G	C	C	J	T	K	I	C	E
K	E	T	F	O	U	I	T	C	H	P
A	X	O	X	L	J	I	N	K	O	I
R	T	U	X	D	F	I	R	L	O	D
Y	U	C	H	A	N	D	X	E	L	E
W	R	H	O	U	C	R	C	W	B	R
M	E	Q	T	F	O	P	T	U	V	M
Y	R	Z	K	U	L	C	L	W	O	I
H	H	Y	P	O	D	E	R	M	I	S



### EXPERIMENT!

#### TEST YOUR TOUCH

#### THE ONE OR TWO POINT EXPERIMENT

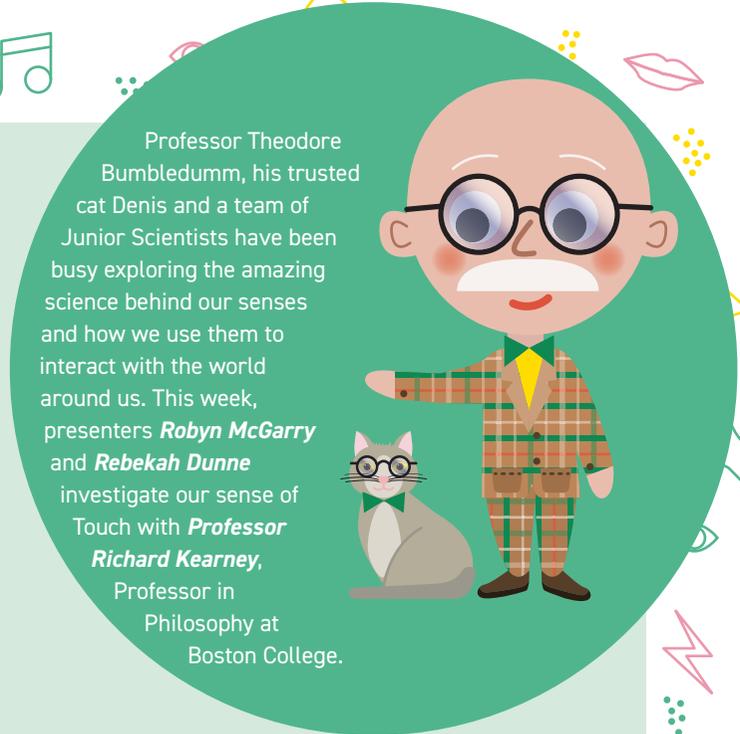
**What you need:** A willing volunteer – a friend or family member and one paper clip.

**What to do:** Straighten your paper clip and then form it into a U shape. Ask your friend or family member to close their eyes. Gently press the two points of the U shaped paperclip into different parts of their skin.



Ask your volunteer to tell you how many points they feel at each area. You could try the skin on their arm, forehead, fingertips, elbow. Where does the person feel one point only? Where do they feel the two points?

**What the experiment shows:** That different parts of your body have more or fewer touch receptors.



Professor Theodore Bumbledumm, his trusted cat Denis and a team of Junior Scientists have been busy exploring the amazing science behind our senses and how we use them to interact with the world around us. This week, presenters **Robyn McGarry** and **Rebekah Dunne** investigate our sense of Touch with **Professor Richard Kearney**, Professor in Philosophy at Boston College.

### FUN FACTS

**1** The manatee, a slow moving, plant-eating aquatic mammal, has the best sense of touch of all animals. They can touch at a distance, which means that they can feel things without touching them, even if those things are really far away.

**2** Plants can feel touch too. The *Mimosa Pudica*, known as the sensitive plant, folds its leaves at night and when they're touched, while the Venus Flytrap closes around its prey when it feels it crawl on its leaves.

**3** Some people are 'touch blind' and can't register the texture, shape or size of objects by touch alone.

