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| Stories |
| Bee bag |
| Great parents |
| Time of your life |
| At its simplest |
| Living things multiply |
| How you began |
| From one cell to many |
| Embed and grow |
| The Rodney |
| Drink, drugs and babies |
| You are legion |
| Human recipes |

1. Where did the pollen come from?
2. Which parent looks after robin chicks?
3. What was the most important time of your life?
4. What do you see if you watch a living cell for a while?
5. What do all living things do, if they can?
6. How big is a fertilised human egg?
7. You get almost the same number of ----- from your mum and your dad.
8. Give two examples of things your genes decide.
9. A fertilised egg is just --- cell.
10. How many cells are you after four divisions?
11. What happens when you reach the womb?
12. This is your home for the next how many weeks?
13. Give two reasons drink and drugs are more dangerous to a baby in the womb than its mum.
14. What are all living things made of?
15. How many buses do you have to fill with sand to get the same number of grains as there are cells in your body?

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| Stories |
| Spaghetti source |
| Pollination (part 1) |
| Pollination (part 2) |
| Tulips and tatties |
| Berry different |
| Nice place to live |
| It’s good to be different |

1. What are the instructions for making the parts that do all the jobs around your body called?
2. Where in your body would you find those instructions?
3. What do genes look like normally?
4. How many genes are in one string?
5. What does pollen contain?
6. Where do you find the parts of a flower that do reproduction?
7. Where is the pollen in a flower?
8. What happens to the pollen when a bee visits the flower?
9. Name two ways plants can reproduce without sex.
10. What can you say about the genes of the parent plant and the new plant it makes?
11. What did you look like three days after conception?
12. Roughly how many different types of cell do we have in our bodies?
13. When does differentiation start?
14. Where was the fertilised egg to start with?
15. Where does it end up?
16. When you first embed in the womb, how many different cells do you make?
17. What will the inner cell mass become?
18. What will the outer wall become?

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| Stories |
| Waters of life |
| Twins |
| Twins (part 2) |
| Human recipes (part 2) |
| Spaghetti source (part 2) |
| Do it my way |

1. What does the amniotic fluid do?
2. How does the baby get out of the sac that holds the fluid?
3. What do people say when that happens?
4. What kind of twins are Michael and Anton Kuchar?
5. How can you tell from the photo?
6. Which are more common, fraternal or identical twins?
7. Fraternal twins happen when --- eggs are released from the ovaries.
8. What can you say about the genes of fraternal twins?
9. What are genes?
10. Every cell contains what?
11. Genes in a cell can be turned – or ---.
12. What’s a long string of genes joined together called?
13. When do chromosomes wind themselves up into much shorter shapes?
14. Where do the two versions of each gene come from?
15. If you’re a pea plant and you get a purple flower gene from one parent and a white flower gene from the other, what colour are all your flowers?
16. If you’re a human and you get an A blood type gene from one parent and an O blood type gene from the other, what is your blood type?
17. What are genes made of?
18. What is a chromosome?

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| Stories |
| Genes and DNA |
| What's in a genome? |
| Alike but different |
| Code of life |
| Book of life |
| Dead cat science |

1. DNA is a very ---- molecule.
2. In what way is DNA like a ladder?
3. Most of your cells contain your genes, but name two types that don’t.
4. What is the handy name for the set of all your genes?
5. What can you say about your genome compared to everyone else’s in the world (unless you’re an identical twin)?
6. More than ---- the genes in your body are the same as the genes in a banana.
7. What’s the reason for that?
8. What’s a gene made of?
9. How many different parts are the rungs of DNA made of?
10. What matters is the ----- of the letters.
11. Why is that?
12. What does having your genome sequenced mean?
13. How many pages did it take to print out Craig’s whole genome?
14. How many of those pages would be different between Craig and you?
15. Who invented DNA profiles?
16. How did young Alec get into trouble at home?
17. What is under his beard?

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| Stories |
| Profile or sequence |
| King in a car park |
| Pollination (part 3) |
| Bees buzz |
| One becomes two |
| The bluebells, the birds  and the bees |
| Splitting up is easy |

1. On average, how many rungs of DNA are different between you and a boy born in China?
2. State two reasons police don’t use entire DNA sequence to identify a criminal.
3. What did the scientists use to identify the skeleton as Richard III’s?
4. How could a bee cause a problem in a flower?
5. The point of sex is to --- the genes from two parents.
6. Why do plants not allow their own pollen to get to their egg?
7. What happens if the pollen is from a different plant?
8. What happens when the sperm fertilises the egg?
9. One bee buzz is made by its wings as it flies; what is the other type of buzz for?
10. What is the simplest form of life on Earth?
11. How do they reproduce?
12. A fertilised egg in animals is very like a ---- in a plant.
13. What come together in both a plant and an animal to make new life?
14. What does the egg contain?
15. What do all living things do?
16. What does asexual reproduction mean?
17. What do all such methods of reproducing have in common?
18. State one advantage of asexual reproduction.

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| Stories |
| How to vegetate |
| Sparrow tree (part 2) |
| Bonobo society |
| Comfy womb |
| Early warnings |
| What does the placenta do? |
| Lifeline |

1. What do all three plants in the picture have in common?
2. Once sperm from the male bird is inside the female, what happens next?
3. Does the female bird make the shell of the egg before or after it’s fertilised?
4. What is the big difference between bonobo and human society?
5. State one reason you don’t have to breathe in the womb.
6. What is the other reason?
7. What is amniotic fluid?
8. What is the least understood of all human organs?
9. What would doctors especially like to know about the placenta?
10. How could knowing more help the mum and the baby?
11. State two jobs the placenta does.
12. List the different steps food takes from the mum’s plate to the baby.
13. What does the placenta protect the baby against?
14. Name two dangers it can’t protect the baby from.
15. Why are drink and drugs so dangerous to the unborn baby?
16. What connects the baby to the placenta?
17. Where is it attached to the baby?
18. Why does the writer say the umbilical cord was your lifeline?
19. Why do identical twins look identical?

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| Stories |
| Twins (part 3) |
| Pairing off |
| Genes and diversity |
| The pages of life |
| Different DNA |

1. What happens to a fertilised egg, very early, for identical twins to develop?
2. If one identical twin is a girl what is the sex of the other twin?
3. When do chromosomes not look like spaghetti?
4. How many pairs of chromosomes do humans have?
5. What’s the difference between the chromosomes in a pair?
6. What is a trait?
7. Give two examples of traits decided by just one gene.
8. Most traits are decided by what?
9. How many genes working together decide the colour of your eyes?
10. Roughly how many genes do humans have?
11. Give an example of different versions of a gene.
12. You are different from someone because of differences in the --------- of your DNA.
13. How many rungs are there in your DNA?
14. How many pages like the one in the picture would be needed to show all that?
15. How much of my DNA is the same as a bonobo’s DNA?
16. How much of my DNA is the same as your DNA?
17. So how many letters in the picture would be different between your DNA and Aliyah’s?

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| Stories |
| Genetic sequencing |
| DNA profiling |
| Short tandem repeats |
| Short tandem repeats (part 2) |

1. What does it cost in 2019 to get your whole genome sequenced?
2. Give two examples of things you can learn from your DNA sequence.
3. What is the danger of learning your DNA sequence?
4. Do crime scene investigation (CSI) experts use genetic sequencing to identify criminals?
5. What do they use?
6. A DNA profile can also be called a DNA -----------.
7. A DNA profile is much smaller and easier to obtain than a DNA --------.
8. What lies between the genes on a chromosome?
9. What does tandem mean?
10. Give an example of a short tandem repeat.
11. What is the key point about short tandem repeats?
12. This is why short tandem repeats are used in DNA ---------.
13. State one other use for DNA profiles besides crime scene analysis.
14. If the crime scene sample was CATCATCATCAT and the suspect had CATCATCAT, what can you say?
15. If the samples from one place in the DNA match what does that tell you?
16. How many places in the DNA do police in Britain currently look?

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| Stories |
| Bedtime reading |
| Bananas in big trouble |
| Platform for life |
| Don't clamp too soon |
| Who are they? |

1. What was DNA used for in one of Jeremy’s favourite books?
2. What’s one big advantage of getting genes from two parents instead of just one?
3. What did supermarkets decide about bananas?
4. Without seeds what can a banana plant not do?
5. In your own words, why was it a bad idea to make every banana plant have exactly the same genes?
6. To what is the placenta attached?
7. What do doctors call a baby in the womb?
8. What is the afterbirth?
9. Why should doctors and nurses not clamp the umbilical cord too soon?
10. How does Ameet learn about the bacteria in his water samples?