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This week the Magazine posed 10 awkward questions children ask their parents. Here are suggestions, from readers and experts, on how to answer these stumpers.

Where do bees go in winter? Don't know the answer? You're not the only one.

According to a new survey, four out of five UK parents have been stumped by something their children have asked. So we posed our own question - what difficult things have children asked you?

We then threw 10 of the best back to the readers, asking for kid-level answers you would offer. Here's a selection of the best - along with suggested answers from a philosopher and from experts from the Science: So what? So everything campaign.

1. WHY DON'T ALL FISH DIE WHEN LIGHTNING HITS THE SEA?

"The lightning spreads out through the whole of the sea, so there's only enough electricity to give each fish a tiny electric shock, so small that it wouldn't even notice."

Matt, Winchester

"Think of it like this: If you poured a drop of Ribena into a teaspoon, you would see that it was a very dark purple colour. Now, if you poured that into a bath full of water, it would spread out and soon disappear completely. What about the fish?"

Lightning is just like that - when it hits the water, it spreads out straight away and becomes harmless to all but those at the very point where it entered the sea (lightning moves a lot more quickly than Ribena, but doesn't taste as nice)."

Darryl, Cardiff

Expert's answer from the Institute of Physics: "Fortunately, only very unlucky fish ever get killed by lightning. Air is an electrical insulator, which means that electricity cannot normally flow through it. During a lightning storm, the very large voltage between the cloud and the ground causes the air in between to break down along a very narrow path, and all the electricity passes down this path (called the lightning streak). When someone is killed by lightning, he or she has unluckily become part of the path and the enormous current that passes through the body kills him or her. Sea water, on the other hand, conducts electricity so as soon as the current enters it, it spreads out in all directions and any fish in the way would probably only experience a small current passing through it, so sparing it from death."



Only fish very near the water's surface would be killed. A fish as little as a foot below the surface would probably be quite safe."

2. HOW MUCH DOES THE SKY WEIGH?

"About the same as 10 million million elephants."

Stu, West Bromwich

"The sky weighs 14 pounds for every square inch on the earth's surface. That ends up being more than 11 billion billion pounds."

Kop, Salt Lake City, Utah, US

"More than you think, kid. The Earth has a surface area of 197 million square miles. Multiply that by four billion to give you the number of square inches. With atmospheric pressure being an average 14.7 lbs (6.6kg) per square inch, this means that the sky weighs roughly 5.2 million billion metric tons. Now go to bed."

Boris, West Midlands

Expert answer from the Science and Technology

Facilities Council's Space Science and Technology Department: "If you want the total weight then it's about one millionth of the mass of the Earth, which is the equivalent of 570,000,000,000,000 adult Indian elephants."

3. WHY CAN'T PEOPLE LEAVE OTHER PEOPLE ALONE?

"Most of us like having other people around, and enjoy helping others. But if we feel unhappy, it's hard to do this. People who annoy other people aren't happy, but they need friends. It's good to be brave and show friendship to them, but it doesn't always work."

Alison Blenkinsop, Aldershot, UK

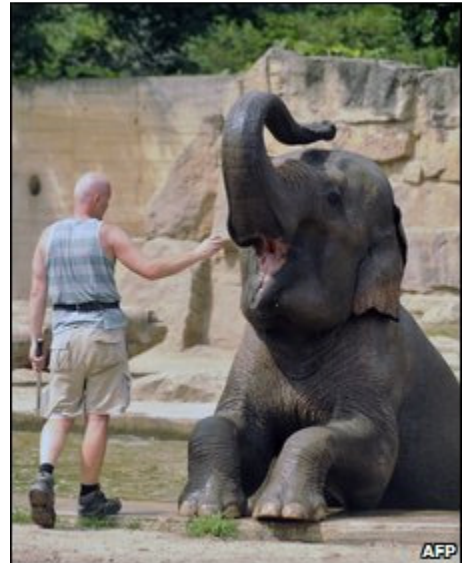
"If people left other people alone, they'd get very lonely very fast, and no one likes being lonely. If everyone in class kept themselves to themselves, how many friends would you have?"

Ewa S-R, London

Philosopher Mark Vernon suggests this approach. "Human beings are social animals, like ants; we thrive when we live well together, in families and communities. But unlike ants who just get on, humans make friends and enemies. It's then that we can't let others be.

"Or, a really short answer: As we make friends, so we make enemies."

4. WHY AREN'T BIRDS ELECTROCUTED ON WIRES?



The sky can be measured in elephants.
Lots of elephants

"Because the wires are only dangerous when there is a way to touch the ground. If the birds had one foot on the wire and one on the ground, they would be electrocuted."

Tony Hengeveld, Stevenage, UK

"It's like touching your tongue to just one end of a battery - then your tongue doesn't go tingly, but if you touch both ends at the same time, it does. Electricity has to flow between a positive and a negative, and birds only touch one wire at a time."

Aidan Reilly, Cambridge

Expert answer from the Space Science and Technology Dept: "Being electrocuted involves a current passing through you. For a bird to be electrocuted it would need to touch two wires at different voltages, or one wire and the grounded structure of the pylon, at the same time. If they did this there would be a current flow and the bird would be likely to be electrocuted. However this is very unlikely to happen and electricity authorities also give considerable thought to the design of their pylons to minimise the chance of birds being electrocuted."



Is this bird in trouble?

5. WHAT IS TIME?

"It's a big shoelace of beads stretching into the distance and each bead is a little moment where we have done something that we remember - either fun, or bad, or sad."

Elizabeth Whyman, Crawley, West Sussex

"Time is an idea thought up by people, to organise their lives and make sure everyone knows when things are meant to happen. So that when Mr A plans a meeting with Mr B they both arrive at the same time on the same day in the same year. It is a system that counts in years, seasons, months, weeks, days, hours, minutes and seconds."

Gita, London

"Everything is always getting older - the grass is getting older, the cheese in the fridge is getting older, the table in this room is getting older, and people and animals are always getting older, too. Time is a way of measuring things getting older, a way of helping us to see exactly how much older anything is getting."

Adam Budd, Edinburgh

Expert answer from the Space Science and Technology Dept: "This is a difficult question to answer. Some scientists may call time the flow of cause and effect. A more detailed explanation could be, according to the Theory of General Relativity, that time is the path which an object will take through a four dimensional universe when left to itself. In such a universe, the four dimensions are indistinguishable from one another: they are not three dimensions of space and one of time. Such an approach can be used to explain the

time dilation of special relativity - that time slows down as one approaches the speed of light in a vacuum - but this is not an argument that is accepted by all scientists."

6. WHY IS THE MOON SOMETIMES OUT IN THE DAY, TOO?

"The moon is actually in the sky for a lot more time than you can see it, but the Sun's so bright that it outshines it. It's like streetlights - if a streetlight is on during the day, you can't see it from further down the street because there's too much sunlight, but at night you can see the same streetlight from a long way away because everything else is darker."

Graham Bartlett, Cambridge, UK

"Its school is on holiday."

Freddie, Durham

Expert answer from the Institute of Physics: "When the Moon revolves round the Earth, half of the time it is on the same side of the Earth as the Sun, and the rest of the time, they are on opposite sides. When the Moon and Sun are on the same side, the Moon is 'up' during the day. When they are on the opposite sides, the Moon is 'up' during the night. So surprise, surprise, the Moon is up during the day as often as it is up at night."

7. WHY DID GOD LET MY KITTEN DIE?

"If all kittens lived forever, there would be no room in the world for new baby kittens. Perhaps your kitten died because somewhere in an animal shelter there is a very lonely young kitten who needs the loving home you could provide for him or her."

Carol Poster, Toronto, Canada

"Sometimes, pets get very sick. Vets try to make the animal better, but they can't always because sometimes the pet is too ill. It is kinder to let the animal die than to make it live longer but in pain."

Mark Booth, Stockton on Tees

Mark Vernon's answer: "No-one knows for sure, though many people have tried to find an answer. What we do know is that when people and pets die, we care for them all the more, which says a lot about why compassion is so important."

Or, a really short answer: "No-one knows, but you know you care."

8. WHY DO I LIKE PINK?



The moon - out before dark



R.I.P. Puss-puss

"Most people have a favourite colour. It's their favourite because seeing it makes them feel good. You like pink now, but when you are older, you may like a different colour."

John Woodgate, Rayleigh, England

"Because it is a beautiful, happy colour associated with lots of lovely things including flowers, food and rosy cheeks."

Ros, Cambridge

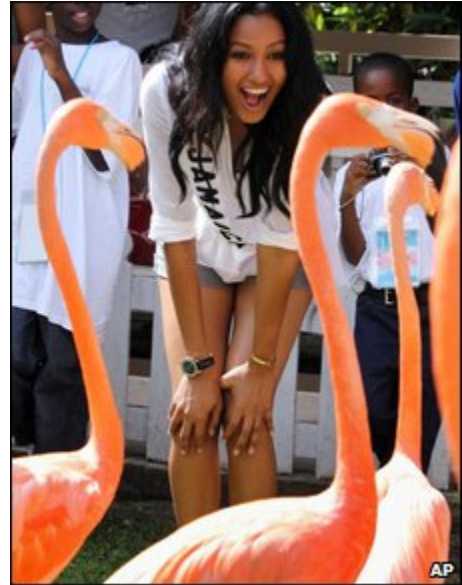
"Girls have been conditioned to like pink. Society has decided that pink is a girl's colour and manufacturers have pandered to this stereotype and produced virtually all girls' toys and most clothes pink. This means that girls are always surrounded by pink and their favourite toys are pink."

Daniel Meadowcroft, Stockport

Mark Vernon says: "Favourite colours unconsciously remind us of things that we find pleasurable or valuable. Pink is often associated with fun, like pink sweets; or the feminine, like pink clothes. Sweets are pleasant; the feminine is valuable."

His really short answer? "Pink reminds you of other things you like."

And psychologist Dr Stephen Briers, of the Science: So what? So everything campaign, says: "Traditionally it is thought girls like pink more than boys do. Scientists have found there may be a biological basis for why girls prefer pink, or at least more reddish colours than boys. Research has found that although more people prefer blue, women tend to prefer pinker shades. Some biologists say that this is because in Stone Age times a woman's role was to pick out reddish-coloured fruit, so they became more sensitive to reddish colours. Another scientist has suggested females may also prefer reddish colours because they need to be more able to spot when their children are ill with a fever (and therefore have a more reddish tone to their faces), or because changes in skin colour can let you know what a person is feeling and help females to read emotions better."



Because you like flamingoes and flamingoes are pink?

9. WHY IS WATER WET?

"Water is wet because it's not too hot and not too cold. If it's too cold, water turns to ice. Ice isn't wet at all, it's solid and dry. It has to warm up to melt back into water. If water is too hot, it turns to steam. Steam isn't wet either, it's more like air. It has to touch something cool - like the bathroom mirror - then it becomes water again. It's lucky for us that water is wet when it's not too cold and not too hot. Just right for bubble baths."

Mark McAndrew, Manchester, UK

Expert answer from Stephanie Bell, of the National Science and Engineering Week:

"There are two answers to this question: One answer is about what makes liquids stick to surfaces and 'wet' them - which is to do with forces between molecules. Water molecules are 'polar' - the arrangement of electrons means that electrical charge isn't evenly spread - and this makes water particularly attracted (electrically) to many surfaces. It also causes water to have lots of other interesting properties.

"But why does water feel wet? This is for a completely different reason. When you have water on your clothes or skin, it normally evaporates into the surrounding air. Evaporation produces cooling, because it takes energy. The feeling of wetness is actually coldness. You can test this by comparing water with another liquid - cooking oil - which doesn't evaporate so freely. Fill two small cups (egg-cups are ideal) - one with water, and the other with cooking oil. (Young children should ask an adult to help.) Let both liquids come to room temperature for a day, or overnight. Dip one index finger in each liquid, lift them out, and then observe for a few minutes."

10. WHY DOES MY BEST FRIEND HAVE TWO DADS?

"Because that's how things turn out sometimes. Real love comes in lots of different packages, but the packaging doesn't matter - it is what is inside the package that matters. Your friend has parents who love and care for him just like we love you. Being loved is the most important thing."

John, London

"There is more than one job to being a Dad. There's helping to make the baby you, and then there's looking after you and helping you to grow up. Sometimes one person does all the jobs and you have one Dad, sometimes the jobs are done by different people and you then can have two Dads."

Gill, Sutton Surrey

"A child always starts with one mum and one dad. When the child is born, the mum and dad are usually best friends. But just like children, adults can change their best friends. Sometimes, the mum or the dad finds a new best friend. When adults find a new best friend, they are often called 'step-mum' or 'step-dad' because they are a 'step' away from



Not too hot and not too cold

their first mum or dad. When we say someone has 'two dads', it might mean their mum was best friends with one of the dads when you were born, then became best friends with another man afterwards."

Mark Booth, Stockton on Tees

Mark Vernon says: "People meet and fall in love. It's an old story. Ideally, their love grows, and they may raise children, as an expression of that love. Usually, a man and a woman fall in love and have kids. But it can be two women, or men."

And his really short answer: "Two men, and two women, can fall in love too."