

Q = Emilie Scholey (researcher)

X = Undefined voice

I = Y2 girl

H = Y2 boy

J = Y2 girl

S = Y2 boy

V = Y2 boy

Z = Y2 boy

Q [Y2 boy S], this looks amazing. It's very interesting. What are you doing? What's your toy going to be?

S It's going to be a dragon that is going to breathe out ice and then one ??? can feed me.

Q Oh. And is this toy, imagine you were going to the toy shop and you were going to buy this as a toy, would it actually have some kind of real thing that it did, like could it move, or would you want it to blow out real ice? Is it ice?

S Yeah.

Q Could it blow out some pretend ice, or what would you want it to do?

S Well I was planning to put some little bits on....I know what I can do with it.....

Q So tell me what's what here. We've got this lovely like building coming out, this long line, is that the neck?

S No that's the tail.

Q That's the tail, oh wow. It's a cool tail. And would this dragon be made out of LEGO or would you want it made out of something else?

S Well I don't really mind what it is made out of.

Q But you want it to look like this?

S Yeah. I decided it.....

Q And how would you want to play with it, would you want it to move or do you want it to stay still, or what would....would the parts move? Could you move it with an iPhone, or could you use a phone to move it? Would you want to be able to stand there with a mobile phone and move it or would you want to have a remote with it? How would you move it if it moved?

S Well I would move it by remote control if it was, if I could have invented it like it ??? and I would have used a remote control. But I've just made it out of LEGO, so I continue on making it so I need to find the LEGO pieces which I need and carry on making these wings.

Q OK. And what are you doing now, tell me what you're doing now.

S I'm trying to find a piece with a big round clock.

Q And would you want – this is a bit difficult to explain – but would you want to have this creature, this dragon...do you know if you walk somewhere outside with a mobile phone, would you like to be able to place the dragon within your world so it did things within your world on the phone and you could make a video for example?

S Yeah.

Q Would that be cool?

S Yeah.

Q What would you want to do with it if you could take it and make it into part of your world. What would you want to do?

S Yes. I made the ice.

Q You made the ice?

S Yeah. So I put that on there and it had that.

Q That is fantastic. Is that where the ice comes out?

S Yeah.

Q And what is actually that, is that the nose or is that just the ice coming out?

S Well I had to put that there, but I could have put it in there but that would ??? and attach this.

Q Yeah. That looks amazing. I'm going to let you carry on with that. [Y2 boy H] are you OK?

I He's going to get the village so ???

Q Can you tell me that again [Y2 girl I] so I can record it, what are you doing?

I I'm making a cage and [Y2 girl J]'s making a dragon that's big enough to fit in this cage and ??? herself. She's wrecked the whole village so we've kept her in a cage.

Q OK. So you're designing the dragon [Y2 girl J], is that right?

J Yeah.

Q And [Y2 girl I]'s building the terrible cage to lock the dragon in.

I Well it's not got any doors so it's just like a roof we can take off and on. Like that's balanced on.

Q What kind of....is it going to be like a prison then?

I Yeah. I'm just going to balance the roof.

Q And would in reality, if this was a toy you could buy in a toy shop, would you want it to be made out of LEGO or would you want it to be made out of something totally different? How would you want it to look?

I Meccano?

Q Meccano? Oh.

I I like to build with Meccano.

Q Do you? How about you [Y2 girl J], would you want it to be made out of LEGO or would you want it to be made out of something soft, or what would you want it to be made out of?

I Some Meccano is soft and nice.

Q Ah, would you like LEGO to be soft and nice?

I Some Meccano you can actually stretch and bend.

J I'd like it to be plushy.

Q You'd like it to be what sorry?

J Plushy.

Q Plushy? What's that?

J Like a soft toy.

Q Oh a soft toy, oh OK. But you're designing what it looks like now with LEGO, so it could be built out of something else couldn't it?

J Yeah.

Q And would this dragon move?

I Yes.

Q Or does it stay still and you move it?

I It definitely....[Y2 girl J] you can answer that, you're making the dragon.

J It will definitely move.

Q Have you done coding before where you code something to move a certain way?

I No.

Q In Reception, did you ever do coding where you code....

I We did, in Reception, we did code Bee-bots didn't we?

Q Yeah. Would you want it to be anything like that?

I Yeah. So it has coding buttons.

Q OK, and how would you move it then?

I Well we have to clear and then tell it what to do.

Q Yeah, I mean that's just an example I'm giving you but would you want some special features on it?

J Yeah.

Q Think about that and I'm going to come back and talk to you in a minute. You know the roof you said on the cage....

J Yeah, it could be like a sensor.

Q A sensor – that is amazing [Y2 girl J].

J So if the dragon escapes there could be like an alarm so we know if the dragon escapes.

I Maybe this will be the alarm.

Q That is fantastic [Y2 girl J], what a lovely idea. So we've got a sensor and an alarm on this toy. I think that would be very interesting wouldn't it because we've got all these sounds and noises and lights.

J And the sensor will be stuck inside.

Q Whereabouts? Inside the dragon somewhere, on the body? Is that what you're showing me?

I This could be the alarm.

J No the sensor should be only one colour, so I'd like it to be one colour.

I What about this?

Q And how do we get the dragon into the....who puts the dragon into the cage? Do you put it in the cage or does it go by itself?

I So [Y2 girl J] is the dragon? and she pretends that he is wrecking the village, like goes ??? and pretends to wreck it. And then I catch the dragon and put it in the cage.

J And this could be like a sort of alarm

I So like we have it here and then if the dragon escapes fire comes out of it and we know when we need to get the dragon.

Q Ah. So how will the dragon escape from this prison you've made?

I He would like try and break the roof, but we're going to make it quite hard.

Q OK. But would it be fun for it to escape every now and again, or do you want it not to escape?

I Yeah it would be fun because then the alarm would go off.

Q And you know you mentioned the sensor, would the sensor be connected to the internet so you could watch the dragon on your computer at home?

I Yeah.

Q That would be good wouldn't it?

J Now I can make noises of 'let me go' when ??? caught me.

Q That's a clever idea. Right I'm going to come back in a minute you two, that's really good. [Y2 boy Z] next. [Y2 boy Z] this looks really interesting, wow. What are you building here?

Z A spaceship.

Q A spaceship?

Z Yeah.

Q Tell me about your spaceship.

Z So the spaceship can go really fast and it can...this isn't actually a spaceship I don't think, I've changed my mind.

Q OK that's good you can change your mind. What's it going to be do you think?

Z A sleigh.

Q A sleigh, wow, that's exciting. And what's your sleigh going to do? What a nice idea. I don't think I've ever seen a sleigh in a toy shop before. What would you sleigh do as a toy?

Z Fly.

Q Fly. And would it actually fly or would you just pretend and pick it up and play with it and fly it.

Z Pick it up.

Q Pick it up and play with it. Why would you want to pick it up, is it more fun to pick it up and play with it or....

Z I think it's more fun to pick it up.

Q Why do you think it's more fun?

Z Er....I don't know.

Q OK, have a think. And is there going to be anything that your sleigh does other than fly, what else can it do?

Z It can also.....

Q Would you make it a technological toy, would you make it more technology so you could add things to it? Like could it connect to the internet or anything, or would you want it to connect to an iPad or anything like that?

Z Er....

Q So for example, if you were looking at your iPad would you want to see this toy on your iPad or not, and why would you want it if you did want to see it on your iPad?

Z I would want to look at it on my iPad.

Q And what would you do with it on your iPad, anything?

Z Fly it.

Q OK, as a game, or just fly the actual thing?

Z Fly the actual thing.

Q OK. And are the colours important on your toy? Do the colours mean anything on your toy, or the shapes that you're using?

Z No.

Q What are these yellow strips here?

Z I don't need them on.

Q Because that kind of makes me feel like we're going forwards that way. But what are they for – anything?

Z Nothing.

Q Nothing. Just for decoration?

Z It's not for decoration.

Q Shall I come back in a bit when you've done a little bit more?

Z Yeah.

Q OK. Well done, keep going, you're doing really, really well. I'm going to come round to [Y2 boy V] now, [Y2 boy V]....

V I haven't made it.

Q Don't worry, it's looking very exciting, very colourful. Tell me about yours [Y2 boy V], what's your toy?

V I'm going to make a small spaceship. It's going to be fast. And then....

Q Do you like spaceships?

V Yeah.

Q Do you have any spaceships at home?

V No.

Q Do you want a spaceship?

V Yeah.

Q And your spaceship, is this the spaceship here, this big square?

V Yeah.

Q OK. Is this important, does this big square do anything or is it part of the spaceship? No. So you're just using that to play with. And show me your spaceship then, what have you built. I love the colours. Do the colours do anything or does it mean anything the colours?

V No.

Q It's rectangular your spaceship, yeah. And if this was a real toy in a toy shop would you want it to be made out of LEGO or something else?

V LEGO.

Q LEGO. Why LEGO?

V Because I love it.

Q Why do you love LEGO so much?

V Because it's fun.

Q It's fun. What's fun about it?

V Well we can make something.

Q And I notice you're putting things on and taking things off. Is that good about LEGO, you can take things on and take things off? No? Where would your spaceship be used in your home, would you use it in your bedroom or would you fly it around the house, what would you do with it?

V In the bedroom.

Q And you know we've been talking this morning about technology and [Y2 boy H] was really good at talking about what technology is. So we're thinking about things like mobile phones, iPads, computer games, apps on the computer, virtual reality things like that. Would you want anything to be connected to this? Would you want to, for example I was talking to [Y2 boy Z] about seeing this on a computer, would you like to see this on a computer?

V Yes.

Q Why? What could you do with it if you had it on a computer?

V I could play with it.

Q How? What would you do? Would you have a remote, or would you use the computer pad, what would do?

V Remote.

Q Remote. And what would you do with the remote?

V I would fly it.

Q Fly it with the remote.

Z Emilie.

Q Yes [Y2 boy Z].

Z Can you help with these two yellow bits?

Q Yes I can, pass it over here. Oh they're very well stuck on aren't they? One's off. I'm just thinking about what we were talking about with games as well [Y2 boy V]. If I had a game on my computer or my mobile phone, this is so colourful and interesting to look at, you

know you talked about that game you play on your mummy's phone where you move things, could that be used on that game? Could you have rather than a person could you use a spaceship?

V Rather a person.

Q You'd rather have a person. Or would you think about a spaceship game you could invent.

V A spaceship game.

Q Mmm. And what's the red bit at the back?

V It's just....I'm just going to stick this gear.

Q I like how that....a gear? A gear. Wow. What do the gears do?

V No this is the super fast speed ???

Q And are you impressed with space?

V What?

Q Are you impressed with space? What do you like about space?

V I can just go on the moon.

Q You'd like to go on the moon. Oh I'd love to go on the moon. Do you know what, I reckon one day you'll go on the moon. So does your spaceship just fly to the moon or does it fly anywhere else? Does it fly to the moon even? Where does it fly?

V It flies to Mars.

Q Mars? So on your computer game maybe you could try and get your spaceship to Mars, that would be good wouldn't it?

V Yeah.

Q [Y2 boy H] that's amazing, what's this here?

H I'm making something like [Y2 boy S]'s.

Z And mine?

H No not yours. It's just a different shape.

Q So yours is going to go to space. And I'm assuming [Y2 boy Z] where would yours fly if it's a sleigh?

Z Mine's going to fly to the North Pole.

Q To the North Pole, brilliant.

H I'm making a Godzilla.

Q A Godzilla? A spacecraft?

H No it's not a spacecraft. After I've made it's spaceship I'm going to make the Godzilla.

Q OK. And is the Godzilla going to be connected to the spaceship in any way?

H No.

Q It's a separate toy?

H Yeah. But what I will need is one of those big green things for it, it's just I can reach one.

Q So show me what you've got done so far and explain what's happening on it.

H So at the moment I'm going to....

Q What's this bit here?

H So I'm building its big spaceships already and I've almost finished, all I need to do is put some finishing touches to it. And then mostly I just need the Godzilla.

Q OK. So is this the front?

H Yeah that's the gun at the front for it.

Q What's the gun for?

H The gun is for shooting people. And what I'm doing now is, I'm trying to find a wheel like this, two.

Q There might be some more on the floor down there. You're going to put some wheels on it now are you?

H To make a winding mechanism.

Q A winding mechanism?

H Yes.

Q What will that do?

H It will make this wheel spin around if it's pressed.

Q And is that going to wind something in? Are you going to use the winding mechanism for something?

H No it will make the power for the gun.

Q Oh OK.

H But you have to spin it hard and this might come off. Fortunately I think I know where to put this.

Q And this thing at the back, the pink thing that goes up, what's that for?

H That's for....that is for, it's to go for a deflector shield for Godzilla.

Q To do what sorry?

H For the deflector shield.

Q The deflector shield for Godzilla?

H Yeah.

Q And you know we talked a lot this morning about technology, would you want to put any technology on to this, or add technology to it?

H Well I am putting this on, which is like technology.

Q What is it?

H It's a winding mechanism.

Q Oh the winding mechanism, yeah. But we're thinking about game consoles, iPads, computers...

H I might make a little DS for him.

Q For him to actually play with?

H Yeah.

Q The Godzilla or the spaceship?

H For the Godzilla. I've finished the spaceship and now I'm just.....

Q So you envisage that your Godzilla would play with its own game and you would watch them play it?

H Yeah.

Q Ah. So you would programme it almost like a robot to play its own computer game?

H Yeah.

Q That's interesting. I like that idea. How are we doing over here? [Y2 boy V] how are you getting on with your spaceship?

V Good.

Q How about your sleigh [Y2 boy Z]? It's looking very good. Where will Santa sit on there?

Z I don't know but I'm thinking it's going to be too big.

Q Well I think it looks great. It's a good size. It's going to have to be big if it's going to fit Santa on it and you've got to fit some Rudolphins haven't you, some reindeer on it somewhere. Would you have reindeer or would you put something else on it?

Z This is actually from Arthur Christmas.

Q Oh you've watched the film have you?

Z Yeah.

Q In Arthur Christmas doesn't he....what's the story now, doesn't he have to deliver a toy to a boy in a....

Z A girl.

Q And what's that [Y2 boy S]? [Y2 boy S] what's this you're building now?

S ???

Q Oh so you've changed the tail, it was actually kind of coming up on a diagonal wasn't it, but now it's straight is it?

S Yes. And I'm changing it to breathe fire.

Q Did you do....[Y2 girl J] was mentioning when you were in green base, or maybe in red base, you did coding on...is it the robotic things?

S That wasn't in green base, it was only in red base.

Q Have you ever done any coding before where you code something and make it move? Did you do it [Y2 boy H]?

H Yeah, but [Y2 boy S] didn't.

Q What was it called that you did?

S There's too much red on this now. I am going to shove it.

Q Oh that would be interesting, you could have it interconnecting so you could have it.... you could put it together and take it apart couldn't you, the tail, if you wanted to. Can you remember the thing you did in, was it coding you did?

H Yeah it was coding.

Q So could you code things to move things do you think?

S ??? and now it's not.

Q Do you think that would be useful with [Y2 boy S]'s invention, his toy?

H I'm not sure. Because coding, [Y2 boy S]'s tail, I think it shouldn't be that long because what will happen, after he takes it off then his whole thing will break. So I'm not sure if he has put bricks the right way.

Q Could that be the aim of his toy then, that you have to build a tail that works with the....

H Yes.

Q That could be interesting couldn't it [Y2 boy S]. Your toy, it could be that you have to try and invent a tail that works with the dragon that you've built. So the dragon's body could stay as it is and you could just build different tails for it couldn't you? Because you've built two very interesting ones so far haven't you, a straight one and a diagonal one. Lots of different shapes there. Wow that's good. You're balancing it now. I like that, that's like a bridge.

S I like these ones. Yes.

Q Wow. So you've got 5 minutes left then we're going to have to stop. 5 more minutes. While you're just finishing off building I want to ask you two more questions. Do you think there should be any limits on how long children play with technology for, or how children play with technology?

H I think they should play it for the whole day.

Q Do you?

H Yeah.

I I think for 2 hours.

Q 2 hours. Why 2 hours?

I Because then they don't have such a long time but it's long enough, say like half an hour.

Q Do you have any restrictions on how long you play with it when you're playing with it? Because you've mentioned a few things haven't you about 'I'm allowed 15 minutes' I think it was [Y2 boy V], you said you can have 15 minutes on your technology when you're playing with the phone. Is that what your mummy and daddy say, you can have 15 minutes and then stop?

V Yeah ??? longer.

I My friend has like a screen time, and when he's used up all his screen time then he has to put the iPad away.

Q That's a good idea.

I Because he plays on the iPad too much.

J I've got time as well. So I only get 20 and my sister gets 20, so if we want to do it together that's 40.

Q OK, and what about you [Y2 boy Z], do you have time limits when you're playing on iPads and things, when you watch TV maybe?

Z I have quite a lot of time on my tablet.

Q Yeah.

X ??? I love the iPad.

Q You love your tablet do you?

X Yeah.

Q What about you [Y2 boy H], what do you think about limits on how long children play with technology for?

H Well to be honest I think technology is my life. Because me and my brother go to this place called the National Video Game Museum.

Q Yeah? And is that good?

H Yeah. Guess what it only has in.

Q What does it have?

H Guess.

Q Just games.

H Video games. Just video games in there.

Q And how often do you go to that?

H We've been to it four times now.

Q And how long do you stay for?

H We stay for 3 hours.

Q Wow. And is it good, you can sit and play the games, not just look at them, you can play them?

H Yeah.

Q Wow that sounds good. And do you go with friends, or just you and your brother?

H My brother had a party there. We went with one of our friends. So that's basically I think is the best place to play video games.

Q Fantastic. What's happening now with yours [Y2 boy V], that looks fantastic, you've put fill....what's this here, this is getting taller and taller, what is that?

V This is a rocket. When the spaceship goes in this rocket will go up.

Q And do you want that rocket to actually work like that, or would you want the rocket to go....up in the sky?

V Yeah.

Q Wow. How could you use a computer to help with this, or an iPad, or a telephone?

V iPad.

Q iPad. What would you do to connect this to an iPad?

V I would just press the button and then it would go up.

Q So you'd want to use the iPad to kind of press the button and make it work?

V Yeah.

Q Wow.