

ANNIE: OK, Jack. Before we plan our presentation about refrigeration, let's discuss what we've discovered so far.

JACK: Fine, Annie. Though I have to admit I haven't done much research yet.

ANNIE: Nor me. But I found an interesting article about icehouses. I'd seen some 18th- and 19th-century ones here in the UK, so I knew they were often built in a shady area or underground, close to lakes that might freeze in the winter. Then blocks of ice could be cut and stored in the icehouse. But I didn't realise that insulating the blocks with straw or sawdust meant they didn't melt for months. The ancient Romans had refrigeration, too.

Q21

JACK: I didn't know that.

ANNIE: Yes, pits were dug in the ground, and snow was imported from the mountains – even though they were at quite a distance. The snow was stored in the pits. Ice formed at the bottom of it. Both the ice and the snow were then sold. The ice cost more than the snow and my guess is that only the wealthy members of society could afford it.

Q22

JACK: I wouldn't be surprised. I also came across an article about modern domestic fridges. Several different technologies are used, but they were too complex for me to understand.

ANNIE: You have to wonder what happens when people get rid of old ones.

JACK: You mean because the gases in them are harmful for the environment?

## Audioscripts

ANNIE:	Exactly. At least there are now plenty of organisations that will recycle most of the components safely, but of course <u>some people just dump old fridges in the countryside.</u>	Q23
JACK:	<u>It's hard to see how they can be stopped unfortunately.</u> In the UK we get rid of three million a year altogether!	
ANNIE:	That sounds a lot, especially because fridges hardly ever break down.	
JACK:	That's right. In this country we keep domestic fridges for 11 years on average, and a lot last for 20 or more. So <u>if you divide the cost by the number of years you can use a fridge, they're not expensive, compared with some household appliances.</u>	Q24
ANNIE:	<u>True.</u> I suppose manufacturers encourage people to spend more by making them different colours and designs. I'm sure when my parents bought their first fridge they had hardly any choice!	
JACK:	Yes, there's been quite a change.	
JACK:	Right, let's make a list of topics to cover in our presentation, and decide who's going to do more research on them. Then later, we can get together and plan the next step.	
ANNIE:	OK. How about starting with how useful refrigeration is, and <u>the range of goods that are refrigerated</u> nowadays? Because of course it's not just food and drinks.	Q25
JACK:	No, I suppose flowers and medicines are refrigerated, too.	
ANNIE:	And computers. <u>I could do that,</u> unless you particularly want to.	
JACK:	No, that's fine by me. What about <u>the effects of refrigeration on people's health?</u> After all, some of the chemicals used in the 19th century were pretty harmful, but there have been lots of benefits too, like always having access to fresh food. Do you fancy dealing with that?	Q26
ANNIE:	I'm not terribly keen, to be honest.	
JACK:	Nor me. My mind just goes blank when I read anything about chemicals.	
ANNIE:	<u>Oh, all right then. I'll do you a favour.</u> But you owe me, Jack.	Q27
	OK. What about <u>the effects on food producers,</u> like farmers in poorer countries being able to export their produce to developed countries? Something for you, maybe?	
JACK:	<u>I don't mind.</u> It should be quite interesting.	
ANNIE:	I think we should also look at <u>how refrigeration has helped whole cities</u> – like Las Vegas, which couldn't exist without refrigeration because it's in the middle of a desert.	Q28
JACK:	Right. I had a quick look at an economics book in the library that's got a chapter about this sort of thing. I could give you the title, if you want to do this section.	
ANNIE:	Not particularly, to be honest. I find economics books pretty heavy going, as a rule.	
JACK:	<u>OK, leave it to me, then.</u>	
ANNIE:	Thanks. Then there's transport, and the difference that <u>refrigerated trucks</u> have made. <u>I wouldn't mind having a go at that.</u>	Q29
JACK:	Don't forget trains, too. I read something about milk and butter being transported in refrigerated railroad cars in the USA, right back in the 1840s.	
ANNIE:	I hadn't thought of trains. Thanks.	
JACK:	Shall we have a separate section on <u>domestic fridges?</u> After all, they're something everyone's familiar with.	Q30

ANNIE: What about splitting it into two? You could investigate 19th- and 20th-century fridges, and I'll concentrate on what's available these days, and how manufacturers differentiate their products from those of their competitors.

JACK: OK, that'd suit me.