

Section A Marking Scheme

Part 1

1.

A	✓
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2. (they) love it / adore machines
3. cynic
4. doesn't have / no faith in it // frightened of / feel(s) uneasy around machines
5. technophobe
6. (they are) afraid of it
7. more space to live (in)
8. less overcrowding
9. perception(s)
10. see the world differently // have a whole new viewpoint

11.

B	✓
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12. gives advice on how to sit / to improve posture
13. changes shape (according to body size and weight)
14. offers / gives (ultra-sound and heat stimulation) massages
15. offers a virtual (reality) world
16. shows (are) instantly available / available whenever you want
17. (it) knows what you like
18. (you) can choose (your) own ending
19. images (are) in 3D

Part 2

20. weight
21. fat content
22. immune system
23. mirror
24. eyes
25. tongue surface

26. teeth
27. sink
28. saliva
29. toilet
30. body waste
31. health status
32. suggests treatment (for any possible illnesses)
33. orders drugs / medicine (you need)
34. summer
35. refreshed // not exhausted
36. winter
37. protection / being protected
38. spring
39. optimistic // hopeful
40. autumn
41. at peace
42. sand on (his skin)
43. the pain of sunburn // getting sunburnt
44. freshness
45. (relaxing) birds singing / birdsong
46. getting lost
47. being thirsty
48. isolation
49. loneliness
50. C
51. monitors (you) through (the) night
52. adjusts (the) room temperature
53. has / provides (a) floating function // zero gravity (field)
54. wakes you (up) in (the) morning

- 55. (a) morning call
- 56. stimulating pictures (on the wall)
- 57. (a) mild electric shock

Part 3

- 58. uneasy
- 59. no smart devices
- 60. no temperature control // the temperature is the same as outside
- 61. no artificial light // only natural light
- 62. meditation
- 63. face-to-face conversation
- 64. reading real books and (real) newspapers [*one 'real' compulsory*]
- 65. 4 3 1 5 2
- 66. can be updated (throughout the day)
- 67. interactive
- 68. reusable
- 69. user-friendly
- 70. how we can protect our privacy / how can we protect our privacy?
- 71. you won't want privacy
- 72. might make you feel lonely and afraid
- 73. you'll be (more) part of a collective self
- 74. robots / machines will take over the world // won't robots / machines take over the world?
- 75. robots are only tools // robots serve us, but don't control us
- 76. they're not human(s) // only humans want to take over the world
- 77. they have nothing to gain
- 78. wash / scrub hands in hands-only sink
- 79. put on rubber gloves * washing up gloves
- 80. throw gloves away // put them down the waste disposal chute
- 81. sterilize kitchen surfaces // clean the kitchen surfaces with an anti-bacterial solution

- 82. potato(es)
- 83. thiamin
- 84. energy production
- 85. cucumber(s)
- 86. Vitamin A
- 87. (helps) prevent(s) cancer
- 88. carrot(s)
- 89. improves night vision // you can see really well in the dark
- 90. improves (the) goodness (of food)
- 91. makes food / it more attractive
- 92. easier to store / stack
- 93. records what food is (has been) used / eaten
- 94. orders new stock / orders the food itself
- 95. (can) suggest(s) (a) healthy / balanced diet
- 96. luxurious
- hygienic
- educational
- 97. surprised

Section A Tapescript

Announcer: Hong Kong Advanced Level Examination, Use of English Section A Listening Test 2006. Instructions to Candidates. You should have on your desk a Question-Answer Book. Do not open it until you are told to do so. I repeat, do not open the Question-Answer Book until you are told to do so.

Now write your Candidate Number in the space provided on page 1 of your Question-Answer Book.

(10 seconds pause)

Now check through your Question-Answer Book and make sure it has no missing pages. Look for the words 'End of Test' on the last page.

(10 seconds pause)

Now stick your barcode labels in the spaces provided on pages 1, 3 and 5.

(15 seconds pause)

You are reminded that all examination materials will be played ONCE only. The test is divided into three parts. You should use a pencil to write your answers for all three parts. At the end of the examination, when you are told to stop, put down your pencil and close your Question-Answer Book. You may not leave the examination room until you are instructed to do so at the end of the examination session. Put your hand up now if you have any difficulties.

The test is about to begin. Keep your earphones on until you are told to take them off. Now look at page 2 of your Question-Answer Book.

(5 seconds pause)

Introduction. Situation.

Your class at school is doing a project about what life will be like in the 22nd Century. As part of the research for the project, your English teachers, Dave Smith and Dorothy Jones, recently visited an exhibition called 'Homes of the Future'. There, they were shown around a 'smart' home called *Discovery Lodge* by two guides named Roy and Rachel. You should take notes and do various tasks based on a recording the teachers made of their visit and some photos they took in the Lodge. The recording includes some sound effects and electronic voices.

Part 1

In this part, you'll hear the guides showing the teachers around the living room of *Discovery Lodge*.

You'll now have two and a half minutes to familiarize yourself with the note-headings for Part 1.

At the end of Part 1, you'll have two and a half minutes to tidy up your answers.

(2½ minutes of Greensleeves)

TONE

Dorothy: I hope this recorder's working Well, here we are, *Discovery Lodge*. Is that the front door, do you reckon? Let's see what happens when I press this button.

Orwell: Welcome to *Discovery Lodge*, the home of the future. Please identify yourselves.

Dorothy: Er, where did I put my ID card? I had it just a moment ago. This is supposed to be a smart home so maybe a smart ID card gets you in.

Dave: Did we get tickets at the gate? I don't remember seeing any tickets.

Dorothy: I thought you had them in your hand just a minute ago? Oh, Dave.

Orwell: Please look at the silver panel. Thank you. Positive retinal identification. Please stand clear of the door.

(Sound of door swishing open)

You may now enter.

Dave: Ah, here're the tickets.

Roy: Throw those away. You won't need them. A camera took a photo of one of your eyes at the ticket booth. That's the key to getting in here. Anyway, come in, you must be – let me check the readout – you must be Dorothy, and Dave. I'm Roy, and this is Rachel

Rachel: Hello.

Roy: ... we're your guides for today, and we want you to imagine that this is our home.

Orwell: And I too am pleased to make your acquaintance, Dave, Dorothy.

Rachel: Do you like Orwell?

Dave: It's, I mean, she's artificial, an artificial intelligence system?

Rachel: Of course. And she has perfect manners. Machines are so much more civil than human beings, don't you think?

Dave: (Whispering to Dorothy) Servile, more like.

Rachel: I'm afraid Roy and I are what you'd call 'technophiles'. We love technology. We adore machines. We really couldn't live without them.

Dave: So what else did your spook camera tell you? How old we are? What our favourite food is?

Rachel: (Laughs) Well, I can tell from your expression and your tone of voice that you're a cynic.

Dave: Sick! I'm not sick.

Rachel: I said, a cynic, C-Y-N-I-C. Someone who doesn't have faith in technology.

Dave: Yeah, I don't have much faith in it. I mean, we're supposed to've conquered the universe by now, but the last time we went to the moon was over 30 years ago.

Dorothy: Oh, stop going on Dave. Just look at this place. It's fantastic and a little bit scary.

Roy: Aha. Now you'll be what we call a 'technophobe', Dorothy.

- Dorothy: A techno-what?
- Roy: 'phobe'. P-H-O-B-E. Someone who's afraid of technology, frightened of machines, feels uneasy around them, know what I mean? Anyway, let's forget about that now. What I want you to do is imagine we're in the 22nd Century. Take a look out of the window. As you can see, we're in a 500-storey high building with platforms attached to it, each one with its own settlement covered by a gigantic glass dome.
- Dave: Hey, that's clever. It looks almost real out there. Let me get a picture.
- Rachel: You see, in 2106, more hostile environments have been mastered, and by that I mean we're able to build in the skies and under the sea. From the physical point of view, mastering these environments means, first and foremost, that there's more space to live in. We needn't stop living where the land ends. We can live anywhere, in fact. As a result, there's less overcrowding. Where do you live, Dorothy?
- Dorothy: Causeway Bay.
- Rachel: Well, there you go. One of the most crowded places on Earth, but in 2106 the people of Causeway Bay have access to the sky and all the space it can afford. But that's just the physical side. As far as the mind is concerned, living in these different environments has changed our perceptions.
- Dorothy: Our perceptions?
- Rachel: Yes. You see the world differently now. You have a whole new viewpoint. Inside your home, inside your dome, you have everything you need, so why go outside? In fact, the real outside world may seem dull and dreary.
- Dorothy: I'm not sure I want to see the world differently. I like it the way it is.
- Roy: Now, folks, let me draw your attention to this floor plan on the wall here. We're at the entrance, that's the two-headed black arrow. *Discovery Lodge* is a simple structure, as you can see. It can consist of a maximum of five rooms, which is what this particular plan shows, but one of the walls is retractable. That means it can be rolled up to the ceiling to create a more open-plan house, say with one big room downstairs and the kitchen.
- Dorothy: Wow. It's like a James Bond set or something.
- Roy: As you can see, most of the walls have slightly curving ends, as this is more pleasing to the senses than a room with straight-angled walls.
- Dorothy: What's that room to the right, though? That has angled corners, doesn't it?
- Roy: Well spotted. That's what we call the 'real' room and it's rectangular because it's supposed to be different from every other room. We'll see why later. For the moment, let's concentrate on the room we're in now - the living room. To the left, this vertical line represents the TV screen, and in front of it, the arm-chair shape, that's the cyber-chair. Oh, and that's the kitchen behind the stairs. It's a specially sealed environment, and again we'll explain why later.
- Dorothy: And that must be the bedroom upstairs, is it?
- Roy: That's right, up the curving staircase, and at the foot of the cyber-bed is the door to the bathroom.

- Dave: Luxury!
- Rachel: Feeling tired after a hard day's work or study? Meet the cyber-chair, because this is where you'll spend most of your time in this room. Ladies first.
- (Sound of sitting down)*
- Orwell: Hello, Dorothy. Are you comfortable?
- Dorothy: Er, I guess so.
- Orwell: Just think of me as the chair. I am everything and everywhere in the house. Would you like me to explain the primary functions of the cyber-chair?
- Dorothy: Sure. Go ahead.
- Orwell: Thank you, Dorothy. Well, firstly, I can give you advice on how to sit. Minute sensors in the seat are reading your posture now, so I can advise you on how to improve it. I think you should try to sit with your feet touching the ground, Dorothy.
- Dorothy: I can't, this chair's so big.
- Orwell: Allow me.
- (Sound of chair changing shape)*
- Another of my functions is to change shape according to body size and weight. You see? I'm changing now.
- Dorothy: Oh, really? What's my weight, then? Don't answer that.
- Orwell: Dorothy, you seem tense and restless. Would you like a massage? It's another of my functions.
- Dorothy: Oh you mean like those chairs you get at airports. I've seen those. They're not very hi-tech, though, are they?
- Orwell: I don't understand that reference, Dorothy. I'm a highly sophisticated model. I offer ultrasound and heat stimulation massages.
- (Sound of chair changing shape)*
- Dorothy: Ouch! That hurt!
- Orwell: Perhaps you'd prefer a trip into virtual reality, Dorothy. The special hood built into the head of the cyber-chair offers you a virtual reality world. Just place the hood over your eyes and you'll find yourself elsewhere. How about the magical land of Oz, Dorothy? I think that would be an appropriate choice for you.
- (Sound of hood operating)*
- Dorothy: Whoah! Now I know I'm not in Kansas anymore!
- Rachel: Let's leave Dorothy in her virtual world for a while. Dave, take a look at this wall.

Dave: Mm. Nice wall.

(Noise of TV coming on)

Hey, now, that's what I call a big screen!

Rachel: Twenty-second century interactive TV, Dave. What would you like to watch?

Dave: I don't know what's on. Have you got a TV schedule?

Rachel: No need for one, Dave. On this unit, TV shows are instantly available.

Dave: What do you mean 'instantly'?

Rachel: I mean the shows are available whenever you want. You can get all kinds of shows any time – drama, comedy, documentaries, you name it. What's more, your interactive TV knows what you like. Have you ever ordered a book or a DVD through the Internet?

Dave: Sure.

Rachel: Well, the next time you visit the ordering site, the computer suggests some other things that may interest you.

Dave: Ah, I see what you're getting at.

Rachel: And another thing you'll have the option to do is you can choose your own ending. Let's say you're watching a love story, for example. Maybe you want it to end happily, maybe you don't. You can choose an ending to suit your mood. But perhaps the most amazing thing is, the images are in 3D. Look, you see, the characters walk right around you and, hey, watch out, you're about to get stomped on by a dinosaur.

(Sounds of dinosaur roaring and foot stamping)

Dave: Jurassic Park!

Rachel: Just take a while to see what's available, Dave, while Roy and I fetch you some refreshments.

Announcer: That's the end of Part 1. You'll now have two and a half minutes to tidy up what you've written.

(2½ minutes of Greensleeves)

TONE

Part 2

In this part, you'll hear the guides showing the visitors around the bathroom and the bedroom of *Discovery Lodge*.

You'll now have two minutes to familiarize yourself with the note-headings for Part 2.

At the end of Part 2, you'll have two minutes to tidy up your answers.

(2 minutes of Greensleeves)

TONE

Roy: Okay, after a great evening's entertainment, it's time to have a wash and go to bed. So let's visit the bathroom of the future, and the first thing to point out is that it's more of a clinic than a bathroom. Let me explain what I mean. First of all, everything is smart. Stand on the scales here, Dave ... that's right. Just there. Now, of course, you've got your weight, that's what ordinary scales tell you, but the smart function here, the smart function can measure your cholesterol level. See that figure there? Okay, and you've also got your fat content below it. Mm, you should think about what you're eating, Dave, tut tut.

Dave: And what about the fourth thing there, where it says 'healthy'? What does that refer to?

Roy: That's your immune system. It's telling you your immune system is healthy.

Dave: At least that's reassuring.

Roy: Okay, so let's have a look at smart item number two. I'm talking about the mirror here. Now, it may not seem anything more than a plain old mirror but, look closely at it, Dorothy, because it's looking at you, your eyes to be exact, just like at the entrance door. Okay, now open your mouth.

Dorothy: Aahh!

Roy: What it's checking now is your tongue surface. Stick your tongue out, that's it. And now, one other important thing, your teeth. Give the mirror a nice big grin. Oh ... Has anyone ever told you you have beautiful teeth?

Rachel: Moving on swiftly to the sink, our next smart piece of equipment. One of the many things you do here is brush your teeth, of course, so you can keep them beautiful. Anyway, what do you think a smart sink can do?

Dave: Check your saliva. Yuk! I bet that's what it does.

Rachel: That's right, and from the saliva in the sink, and everything else, the mirror and the scales, oh yes, and let's not forget our smart toilet, the last piece of equipment, which of course analyses body waste, from all these things you get a readout that tells you what your health status is.

Roy: And that's not all you get. The secondary functions of all this equipment are also important. The smart bathroom will give you, for example, a diagnosis, just like a doctor. But not only will it give you a diagnosis, it will suggest treatment too, I mean treatment for any possible illnesses. It will also actually order the drugs or medicine you need. It'll know already if you're allergic to any particular drugs or medicine, so you don't need to worry about that.

Rachel: As for the shower, well, it's a good old-fashioned hot water one.

Right, now you're all washed and brushed up, come back into the sleeping area here. Have a look at these walls around you. Like the colour?

Dave: It's okay, I guess.

Rachel: The walls are covered in a special heat-sensitive paint. They change colour according to the seasons and the moods of the person living in the Lodge. Now it's spring – the fog and the rains are just beginning, the lawn is becoming lush, so a grassy colour is a perfect complement to how you feel. Your mood is optimistic, yes, you're hopeful about the future, hopeful that today will be a good day.

Dorothy: Mm. I'm not sure that shade really does it for me.

Rachel: But as the summer approaches, the temperature climbs, you prefer a cooling colour, a shade that captures the azure sparkle of a swimming pool, for example, or a tropical lagoon – you want to feel refreshed and not exhausted as we often do in the summer heat.

Dorothy: I like it. You just say the word and the paint changes.

Rachel: That's right. Autumn arrives, the leaves fall from the trees, no longer green but a lemony colour. You want something to match this and make you feel at peace, yes at peace.

Dorothy: Wow! The room has a completely different feel to it.

Rachel: And finally, it's winter, not too bad in Hong Kong, but there're those chilly days in February when you might want the walls to take on a warming shade, the glow of a log fire in the hearth. Now you want a feeling of being protected, you know, of some kind of protection against the cold.

Dave: Manchester United colours. Fantastic!

Rachel: Well, perhaps not quite that bold. Alright, Dave, now lie down on the bed and have a look at the wall at the foot of it. That one's a digital wall that can recreate pretty much any environment you like. Orwell, do you want to take over?

Orwell: Certainly, Rachel. I'd be glad to. Which of these images do you find most relaxing, Dave?

(Sound of water gently lapping)

Dave: Well, the lake and the mountains are beautiful, but that kind of landscape gives me a feeling of isolation. Yeah, isolation and loneliness. Loneliness isn't a nice feeling to have, especially in your own home.

(Sound of waves lapping on a beach)

The beach looks nice, but you know it makes me think of sand on my skin, and I can't bear that feeling of raspy sand. Yech. It makes me shudder. Also it makes me think of the pain of sunburn. I always put loads of cream on, but somehow I always get burnt.

Orwell: I imagine you have the same feelings about the desert, Dave? Am I correct?

(Sound of desert wind blowing)

Dave: No, actually the desert reminds me of getting lost.

Orwell: Getting lost? What do you mean, Dave?

Dave: Well, I went on holiday with my family to Australia when I was a kid and we got lost driving across the Great Victoria Desert. And just seeing that picture also makes me think about being thirsty. We ran out of water pretty quickly because Dad didn't ration it properly..... We nicknamed him Crocodile Dunderhead on that trip.

Go back to the forest. Yeah, that's the one I'd go for. It has a freshness to it. I can actually smell how fresh it is. And it makes me think of birds singing.

(Sound of birdsong and leaves rustling)

Wow, that's great, Orwell. Birdsong on demand.

Orwell: I'm glad you like it, Dave. I find birdsong relaxing. How are you feeling now? Are you sleepy, Dave?

Dave: Yeah, you bet. This bed feels really weird.

Orwell: Like the cyber-chair, it has a number of special functions. It will monitor you through the night, for example.

Dave: Monitor?

Orwell: That's correct. Everything from your breathing to your brain activity.

Dorothy: There's not much of that, even when he's awake.

Dave: Dorothy!

Orwell: It also adjusts the room temperature. If you get too hot, it cools the temperature down. If you get too cold, the opposite.

Dave: *(Yawning)* Mm. This bed is soooo comfy!

Orwell: That's because your body's not touching the mattress, Dave. The bed has a floating function. That is to say, you're floating in zero gravity just like astronauts do in space. And another function is, it'll wake you up in the morning, wake you either gently or harshly depending on how deeply youDave? Dave? Excuse me.

Alarm Voice: Good Morning Vietnam!

Dave: What the -!

Roy: Sorry, Dave. Don't blame Orwell. It was me who activated the alarm. Robin Williams is guaranteed to wake you from the deepest sleep. Have you seen the movie? Anyway, as you can see, the cyber-bed is very effective in getting you to sleep. And it's just as effective at getting you up. In fact, there are multiple ways that the bed can ensure you wake at the right time. A good old-fashioned morning call, like the one you just got there.

Dave: Yeah. I mean, I prefer something softer, actually.

Roy: Or perhaps you might respond better to stimulating pictures on the wall. Look, here comes the sun or would you prefer Nicole Kidman..... See, she's waving for you to wake up and seize the day. How much more encouragement do you need? Or, if you really are a heavy sleeper, a mild electric shock, delivered direct to the nervous system.

Dave: Oh, no electric shocks please. Nicole'll be fine.

Dorothy: Smart toilets, smart walls, is there anything real and genuine in this place?

Roy: Of course, Dorothy, but be careful what you wish for, you may get it.

Announcer: That's the end of Part 2. You'll now have two minutes to tidy up what you've written.

(2 minutes of Greensleeves)

TONE

Part 3

In this part, you'll hear the guides showing the teachers around the 'real' room and the kitchen in *Discovery Lodge*.

You'll now have two minutes to familiarize yourself with the note-headings for Part 3.

At the end of Part 3, you'll have 10 minutes to tidy up your answers for the whole paper.

(2 minutes of Greensleeves)

TONE

(Sound of wooden door opening)

- Rachel: And so, the 'real' room. Come in. Sit down. Make yourselves comfortable, if you can.
- Dorothy: Ooh. It's a bit creepy in here, a bit ... dead.
- Rachel: That's what the 'real' room's all about. Its features are the things that it *doesn't* have rather than the things it does.
- Dorothy: I'm not sure I understand.
- Rachel: Well, to start with, there're no smart devices in here, for example.
- Dave: Except for me, I'm smart.
- Dorothy: Yes, but you're not a device. If you were, I'd switch you off.
- Rachel: Also, there's no temperature control. There's a fan here to cool you down, but the temperature is the same as it is outside. Are you feeling a little warm, Dave?
- Dave: Mm. I get your point.
- Rachel: And the last thing is there's no artificial light. The only light you see coming through the window is natural light.
- Anyway. Typical activities you might want to pursue in the 'real' room could be meditation, for example. You may feel the need to meditate without the assistance of IT appliances. Alternatively, you might want to have a face-to-face conversation with another person.
- Dorothy: But you could do that anywhere in the Lodge, couldn't you?
- Rachel: Well, yes, but that would usually involve some kind of cyber device such as a 3D projection. In the 'real' room, the idea is to sit down with somebody and talk with them face-to-face. In 2106, having a 'normal' conversation is an unusual and unsettling thing to do.
- Dave: And what are these old books here for? Decoration?
- Roy: No, Dave. The 'real' room is also for reading 'real' books and 'real' newspapers. I mean, that's if you want to be an old fuddy-duddy. Paper reading materials will be a thing of the past sooner than the next century, believe me.

- Dave: But nothing will ever replace reading a real book or newspaper, will it? I mean, having to read off a vertical screen where you can't see the whole page just gives you a headache.
- Roy: Yes, but you don't have to read off a vertical screen these days. Instead of these dusty old things
- (rustle of newspaper)
- I read my newspaper on something called a receptor plate. The plate has micro-circuits inside it. Every night, when I've finished with it, I press the 'Reset' button and leave the plate outside the front door. When the sun comes up in the morning, a radio signal is beamed to the plate with the day's news. K9, my trusty robot dog, collects it from the doorstep and then brings it into me so I can read it over breakfast. When I've finished a page, I just click 'Page Down' and go on to the next page.
- Rachel: And there are numerous advantages that an e-newspaper has over a traditional one. It can be updated throughout the day. Radio supplements can be beamed to the plate at any time to update you on the latest developments.
- Roy: It's also interactive. You can send a letter to the editor immediately, for example, just by dictating it into the plate.
- Rachel: That's right. And along with being interactive, it's also reusable. Once you've finished it, as Roy explained, you press the 'Reset' button and it's ready to use again. It's all set for the next edition.
- Roy: And last, but not least, it's user-friendly. It doesn't get crumpled up, wet in the rain, or chewed by the dog, or the baby, like a 'real' newspaper often does.
- Rachel: Okay. Now, has anyone got any questions they want to ask before we return to the more interesting smart sections of the Lodge?
- Roy: Yes. Questions, Dorothy?
- Dorothy: All the smart stuff you've shown us can only work if all our personal information is available online, so my question is, how can we protect our privacy? I mean, I just don't see how we can protect it.
- Rachel: Well, that's a good question, and I have a simple answer that may surprise you, and that is, in the 22nd century, you won't want privacy.
- Dorothy: How can you say that? Everyone wants it.
- Rachel: Now, they do, yes, but in the future, that won't be true. One reason is, privacy might be something that makes you feel lonely and afraid.
- Dorothy: What was it that old movie star Greta Garbo used to say? 'I want to be alone'?
- Rachel: Yeah, but what you'll be saying in 2106 is 'I want to be online', because the second reason why you won't want privacy is, you'll be part of a collective self. With everyone communicating online, and your smart home in touch with a gigantic database serving the community, you'll become less of an individual and more part of a collective self. Even now in 2006 our respect for privacy is disappearing. Just think of 'reality TV' shows like *Survivor*.

- Dave: Yeah. Already there're too many cameras watching what we do. And that's something that worries me. I mean, machines, let's say robots, for example, robots will eventually take over the world, won't they? That's what's happening, isn't it? Technology, computers, robots: they're taking over everything.
- Roy: That's nonsense, Dave, and I'll tell you why. We're not in danger because (a), robots are only tools. They serve us, they don't control us. (b), they're not human. Only humans want to take over the world. The whole idea of world domination, total power, is a human one.
- Dave: Yeah, but –
- Roy: And (c), they have nothing to gain by taking over, nothing to gain at all.
- Dave: Hey, wait a minute. How do we know you're for real and not some kind of fancy A.I. creatures?
- Roy: We're not computers, Dave. We're physical.
- Rachel: Absolutely. Okay, folks. Time to visit the kitchen.
- (Sound of wooden door closing)*
- Orwell: Please place your hands on the decontamination pad before entry. Dave, your hands are covered in newspaper ink. Please take care to wash them again thoroughly.
- (Sound of door swishing open)*
- You may now enter.
- Dave: Why so much fuss just to get in?
- Rachel: Well, by the 22nd Century, we'll be much more prone to infections or allergies, so in the kitchen certain procedures have to be followed every day.
- Dave: Such as?
- Rachel: Right. First, you'll need to wash or scrub your hands in a hands-only sink.
- Dave: Hands-only?
- Rachel: That's right. No food or dishes should be washed in this sink, just your hands. Then, you'll need to put on rubber gloves.
- Dave: You mean like rubber gloves for washing up?
- Rachel: Not exactly. I mean ones like doctors or surgeons use. Very thin and very tight. Only then do you prepare your food. After preparation of the food, the gloves should be thrown away. You don't use them again. You put them straight down the waste disposal chute. Finally, you'll need to sterilize the kitchen surfaces, I mean clean them with an anti-bacterial solution. The surfaces must be clean and germ-free for the next time you prepare food on them.
- Dave: So, handling foodstuffs will be a bit like experimenting with deadly bacteria. I guess I'll have to wear a mask too.

- Rachel: No, that won't be necessary. And food won't really need that much in the way of preparation. Dorothy, just open the smart fridge there and see what you can find.
- (Sound of fridge door opening)*
- Dorothy: Wai! What on earth are these things? Vegetables? I've never seen vegetables this shape or colour before.
- Roy: Welcome to the wonderful world of GM food. Those dark yellow cubes there are potatoes, believe it or not. They've been specially engineered with extra thiamin – that's T-H-I-A-M-I-N – to produce more energy. Thiamin is vital to energy production.
- Dave: I prefer rice, actually.
- Dorothy: And what are those purple cylinders?
- Roy: Cucumbers, and they're purple because they're now full of Vitamin A - you know how to spell 'vitamin', don't you? Anyway, Vitamin A helps prevent cancer.
- Rachel: Though, of course, cancer is not such a big problem in 2108.
- Dorothy: And what are those cone-shaped things? They look familiar.
- Roy: They're carrots, and they've got huge amounts of beta-carotene in. Look, let me write that down for you - be-la ca-ro-tene - which is why they're a brownish-red. Beta-carotene improves your night vision, you know. You can see really well in the dark.
- Dorothy: But why go to all the trouble to change the colour and the shape?
- Roy: Oh, there are plenty of reasons in addition to the one I've just given you, which is basically that it improves the goodness of the food.
- Dorothy: Yeah, I understand the goodness thing.
- Roy: Well, obviously bright colours also make the food more attractive. Just think of fruit and vegetable shops in Hong Kong now and how the vendors shine bright lights on them to make them look more appetizing.
- Dorothy: I suppose so.
- Roy: And an important point about changing the shape is that food is then easier to store. Look, you can stack it, just like in the fridge here, if the shapes are regular and they're all the same size.
- Dave: What are those little marks on the sides of the vegetables there?
- Roy: Aha. That's an ID tag or barcode and it's related to one of the functions of the 'smart' fridge. If you take something out and use it, the fridge records that food item as used.
- Dave: Oh, I see, it keeps a record of what you've eaten. And then when you open the fridge to make dinner the next time, it says, 'Sorry Dave, you ate the last tomato yesterday.' That's not much use, is it?
- Roy: That isn't, no, but what the fridge does is order new stock when it begins to get low.
- Dave: It orders the food itself?