



Hello. I'm Margot Politis. Welcome to Study English, IELTS preparation.

Today we have an environmental theme on Study English, but it's an environmental story with a difference.

We find out about a new toilet system that has been developed to save the local environment in a Tasmanian park.

We're going to be looking at how to talk about 'processes', so listen carefully to David Holman talk about his new environmentally friendly toilet.

The liquid waste comes from the toilet behind me. There's a containment vessel for the solids. From the bottom of the solids you drain off the liquid and it comes down here down this pipe.

OK. The pipe tips into this tipping bucket arrangement, and what this does is it fills up to a point, and then it suddenly tips and that will measure each time it tips. So we can calculate the amount of liquid effluent that's gone in.

As that fills up, you can see the towelling material here will come in contact with the effluent, the air is drawn in through these holes and will actually direct the air in onto the surface of the water, through the wick and out through the top.

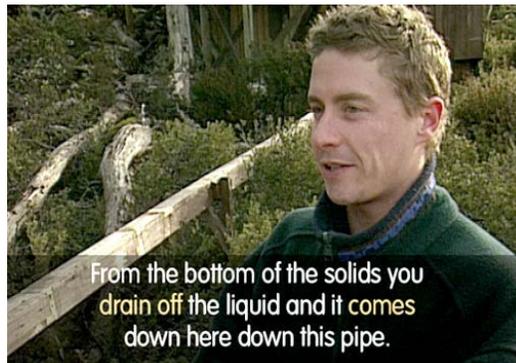
OK, so David was talking about how his toilet, the Enviro-Loo, works.

He was describing a 'process'. Today we're going to look at the type of language you'll need to describe processes.

We'll listen to David again. This time, listen out for the types of verbs he uses.

The liquid waste comes from the toilet behind me. There's a containment vessel for the solids. From the bottom of the solids you drain off the liquid and it comes down here down this pipe.

OK. The pipe tips into this tipping bucket arrangement, and what this does is it fills up to a point, and then it suddenly tips and that will measure each time it tips. So we can calculate the amount of liquid effluent that's gone in.



David uses a variety of verbs and tenses. But mostly he uses the 'simple present tense'.



The 'simple present' is often used to describe processes and procedures.

Let's look at some examples.

The liquid waste comes from the toilet behind me.

OK. The pipe tips into this tipping bucket arrangement, and what this does is it fills up to a point and then it suddenly tips.

There's also another, more formal way of describing processes.

That's using the 'passive voice'.

In academic writing, it's common to use the 'passive voice' for actions in a process or procedure. When you use the passive voice, your writing becomes impersonal and distant. This is more formal, and is often more suitable in an academic setting.

Listen for a passive verb here.

As that fills up, you can see the towelling material here will come in contact with the effluent, the air is drawn in through these holes.

He says 'is drawn in': 'the air is drawn in'.

Notice there is no 'subject', no person or thing doing the action, it is just done. This is called the 'passive voice'.

This highlights the process or action, rather than the person or thing doing the action.

The passive is used when the important thing is not who did the action, but the action itself.

This is true when you are describing processes. The process is the same, no matter who is doing it, so we choose the passive voice.

Let's look at bit more closely at how the passive is formed ...

Passive verbs are formed by using the verb 'to be' plus the 'past participle' of the verb.

Let's look at the verb to 'draw in', to bring something in.

The past participle is 'drawn'. This is an irregular past participle.

So the passive form is 'to be drawn in'.

draw in
drawn in
to be drawn in



The different forms of the passive vary according to the action, and when the action happened.

OK. So in formal writing, we use the passive form for processes. But David doesn't always use the passive, because he's having a conversation with someone.

Let's look at one of David's more informal sentences, and see how we could change it into a more formal description.

There's a containment vessel for the solids and from the bottom of the solids, you drain off the liquid.

He says 'from the bottom of the solids you drain off the liquid'. Let's look at the main part of that sentence.

'You drain off the liquid'.

The verb is 'drain off'.

In a passive sentence, we'd say 'is drained off', the 'past participle' with the present tense form of 'to be'.

To form the passive, we also need change the sentence around.

Most English sentences use the active form – that's 'subject verb object'. But in the passive, sentences begin with the object of the verb – 'object verb subject'.

In this sentence, we know that 'drain off' is the verb, 'you' is the subject and 'the liquid' is the object.

So to form a passive sentence, we'll need to turn the sentence around into 'object verb subject'. Notice that we add the word 'by'.

'The liquid is drained off by you.'

But in a process, we don't need to include the agent of the verb, so it usually gets left out.

Our new, more formal sentence reads:

'The liquid is drained off.'

So let's go back to that full sentence

'From the bottom of the solids, you drain off the liquid.'

'From the bottom of the solids, the liquid is drained off.'

From the bottom of the solids,
you drain off the liquid.

From the bottom of the solids,
the liquid is drained off.



Here's another one.

We can calculate the amount of liquid that's gone in.

We can calculate the amount of liquid.

The subject is 'we'. This will be dropped in our passive sentence.

The object is 'the amount of liquid'.

The verb is 'can calculate'.

'Calculate' has the past participle 'calculated'.

When there are auxiliary verbs like 'can', we use the infinitive form of the verb 'to be'.

So the full verb phrase 'can calculate' becomes 'can be calculated'.

Remember that a passive sentence starts with the 'object', then the 'verb', so:

'We can calculate the amount of liquid.'

becomes:

'The amount of liquid can be calculated.'

OK, let's finish today by testing you on the passive.

Listen to the steps in a simple process.

This is how you make a cup of coffee. It's in a conversational style.

You fill the kettle with water.

You turn on the kettle.

You boil the kettle.

You pour the hot water into a mug.

You add some sugar.

Then you can drink it.

OK. Let's start at the beginning.

You fill the kettle with water.

What's the verb? 'Fill'. The subject? 'You'. The object? 'The kettle'.

The passive verb is 'is filled'.

The new sentence is:

'The kettle is filled with water.'



See if you can do the next one ...

'You turn on the kettle.'

The verb is 'turn on'.
The subject is 'you'.
The object is 'the kettle'.

'The kettle is turned on.'

'You boil the water.'
'The water is boiled.'

'You pour the hot water into a mug.'
'The hot water is poured into a mug.'

'You add some sugar.'
'Some sugar is added.'

'Then you can drink it.'
'Then it can be drunk.'

But we'd usually say,
'Then it's ready to be drunk.'
So let's go through that again.

'The kettle is filled with water.'
'The kettle is turned on.'
'The water is boiled.'
'The hot water is poured into a mug.'
'Some sugar is added.'
'Then it's ready to be drunk.'

And I think I'll go and make a cup of
coffee right now.

Don't forget to practice these active and passive sentences.

And I'll see you next time for Study English. Bye.

