# Lesson: Critical Thinking

> This lesson explains what critical thinking is and why it is an important life skill. It also provides information about how to think critically and gives students the opportunity to put their own critical thinking into practice. There is a lot of scope for students to talk about their own ideas and beliefs here, so allow as much time as possible and encourage contributions from as many students as possible. Some students might feel sensitive about some of the points, so don't insist that *all* of the students comment on *all* the questions.
>
> **Level:** Intermediate and above (equivalent to CEF level B1 and above)
>
> **Time:** 1-1½ hours
>
> **How to use this lesson:**
> This lesson is designed to be done in class but if you prefer, exercise 1 can be set for homework in preparation for the lesson.

## Worksheet A

1  **This first exercise introduces some key vocabulary, so take the time to explain any words that students are unfamiliar with.**

   If you do it in class, allow about 5 minutes for students to read the text and complete the first part of the task. Students can work on the words in pairs if you prefer. They should make brief notes for the meanings of the words. Check their answers, eliciting something similar to those suggested below. If necessary, remind them that the main aim of tasks such as these is to use the *context* to help them work out possible meanings of unknown words.

   **Suggested answers**

   ► **cross-check** – make sure something's true by looking at other articles on the same story

   ► **bias/prejudice** – these two words have very similar meanings. *Bias* can refer to something you *support*, however, like a belief or a football team. So you can be biased *in favour of* or *against* something. You are usually only prejudiced *against* something.

   ► **hoax** – something that was done to fool others, a bit like a practical joke. Typical examples on the internet are photos that have been photoshopped to look like there's a UFO.

   ► **source** – where the story/information/photo came from

   ► **analyse** – look closely at; examine

   ► **evaluate** – decide on the value/usefulness of something

   ► **common sense** – the logical ideas and knowledge that most people have

   ► **viewpoints** – opinions (e.g. the different viewpoints on both sides of an argument)

   Allow a further 5-10 minutes for students to re-read the text and answer the open-ended questions. They should do this alone. Those who finish early can compare their answers with a partner. There are no right or wrong answers in the second part of the task. Once all students have finished (or if done as homework) spend 10 minutes conducting a discussion based on students' answers.

2  **Students should be able to do the first 7 questions in about 5 minutes. If you prefer, you can elicit answers to these before allowing a further 5 minutes to write their answers to questions 8-10.**

   Allow students the opportunity to discuss their answers. Many of the answers are subjective but the notes below might be helpful.

   **Suggested answers/prompts**

   1  Many of us take what we read for granted but it is often a good idea to check other sources – especially if we are planning to pass the information on.

   2  Critical thinking uses a combination of logic and emotions (or intuition). Some people are naturally more emotional in their reaction. This is not necessarily a bad thing. Critical thinking does, however, rely more on reason and logic.

   3  This question encourages students to examine their own bias and prejudice. This will vary depending on the class and the individuals in it, but it should spark a lively discussion.

**1**

4     The ideal situation probably lies somewhere between the two answer choices. For students who chose answer *a*, ask them how often they are wrong. For students who chose answer *b*, ask them how long it takes them to reach a decision.

5     Again, opinions will vary here, and there are other factors to consider, such as whether students can actually tell the difference. Emotional language is usually an indication that something is an opinion rather than a fact.

6     Answer a is *a* good indication of the *popularity* of a model of mobile phone. Answer *b* might be a better indication of the *quality* of the phone.

7     Answer *a* is the most logical. Answer *b* is prejudiced and based on opinion. It is also a generalisation – there are *many* reasons why people move to another country, not only one.

8     The most obvious use of critical thinking in studying is in the area of research. Ask students which source they would trust if they wanted information for a project on the first man on the moon. Give them a choice between a TV programme, a newspaper, NASA, a blog by a space enthusiast and a book about famous explorers. Point out that NASA would probably be the best source, since they organised it. The others will have varying degrees of subjectivity. The blog might be one to avoid completely, since it is the opinion of only one person.

9     Prompt by asking about the best times for problem solving. Do students think best in the morning/late at night/after a night's sleep/while travelling, for example? Are students able to use critical thinking when they study but not when they are listening to the news? Are they naturally more/less inclined to believe things from certain sources?

10     This might involve overcoming a problem, uncovering a lie, detecting a hoax, planning something, etc.

## Worksheet B

**3**     **Students will need 2-3 minutes for this. Those who finish quickly can compare with a partner. Elicit the answers and correct any mistakes. Students will have the opportunity to use these expressions in the next exercise.**

**Answers**

1 c       2 f       3 e       4 a       5 d       6 b

**Optional activity**

Remind students that *think* is often followed by *about* or *of*. There are, however, many more expressions to do with thinking. You might wish to introduce some, or all, of these to your students.

►     (to give someone / to be) food for thought

►     on second thoughts

►     to be lost in thought

►     to collect your thoughts

►     to have no time to think

►     to lose your train of thought

►     to think ahead

►     to think big

►     to think long and hard about something

►     to think of someone/others (in a nostalgic or caring way)

►     to think on your feet

►     to think out loud

►     to think positive

►     to (not) think twice

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4    Here, students should aim to practise using the expressions with *think* from exercise 3. If you have used the optional activity above, ask them to include these as well.  Encourage them to give personal examples. After a few minutes in their pairs or groups, students should tell the rest of the class their views.

Focus on correct use of the expressions in this activity. Sometimes the finer differences between the meanings are hard for students to grasp. If you hear students trying to say something that is best said with one of these expressions, suggest ways in which they could use the expression. For example, you might hear:

*I had to think about it again.*

You say:

*So you thought twice about it.*

or

*So you had to think it over.*

or

*So you thought it through.*

5    Allow a minute or two for students to go through the list and ask about anything they are not sure of. Students could have a few more minutes to discuss the suggestions in pairs. Then elicit opinions on each point. All of the points are useful. Which ones do your students think are the most/least useful? Which ones do they practise themselves? What is the likely result of doing each one? What is the best way to ...?

6    Explain that critical thinking is an important part of business. If your students are older, you might like to start by asking them how they think critical thinking helps in business. For younger students, you will probably need to confine this topic to things that they have experience of, like organising their lives, planning school projects, etc.

Although the concept looks difficult, it is actually very simple and easily within reach of even the youngest students at this level. For some classes, you can ask them to spend five minutes looking at the information given. If you think they will have difficulty, go through the text and the example as a class, section by section.

After making sure everyone understands, ask students to do the task. They can do this in pairs if you prefer. They should include at least three steps in the process but there is no upper limit. They can add more steps as they need to.

The scenario can be slightly altered according to the ages of your students. Older students who live independently could prepare for a visit from their parents, while younger students could imagine that their parents have been away for the weekend.

Allow up to five minutes. Elicit responses from the class. You can write some of them on the board as students tell you, encouraging as many students as possible to contribute. Look out for steps that could be combined to save time. You should also check that things are in a logical order and that no vital steps have been missed out.

Follow up by asking students to work in pairs or small groups to discuss a different critical path analysis based on something they know about. Ideas could include:

►    Preparing a meal (different to the one given)

►    Organising a party/concert/show/exhibition

►    Stripping down and servicing a bike/skateboard/engine

►    Getting and installing new software/hardware

►    Completing a project (depending on students' ages and interests)

►    Revising for end-of-term exams (remind them to include reasonable breaks for relaxation)

►    Preparing for a journey to another country

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## Worksheet A

**1    Read the text and suggest meanings for the words in bold. Then answer the questions.**

cross-check _____

analyse _____

bias _____

evaluate _____

prejudice _____

common sense _____

hoax _____

viewpoints _____

source _____

**Critical thinking and the internet**

The internet is a place where we really should be thinking more carefully. Anyone can write anything they want and it's not all true so why do we believe them? The answer is usually because we are not properly informed or because it fits in with our beliefs. In other words we don't take the time to **cross-check** information to see if it's true. And that's because we want to believe it. We let **bias** and **prejudice** get in the way of the truth.

_1    Why do we believe things on the internet that are not true?_

_____

Let's take an example. On social media someone posts a photograph of a man. The message says, "This person stole my bike. Please share this picture and let's find him". Within hours, that photo could reach hundreds of people, maybe thousands. Sharing it seems like a good thing to do. After all, you may know what it's like to have something stolen, it would help the police, and wouldn't it be great if the person got his bike back, thanks to you?

_2    Do/Would you share things like this online?_

_____

But what if it was a **hoax**? What if that person is completely innocent? What if someone posted that photo to get revenge or they got the wrong man? It's possible, isn't it? Think about what might happen next. A completely innocent person has his photo shared on the internet. What will he think? What will his parents/friends/teachers/boss think? Every day people share hoaxes that thousands of people see.

_3    Can you give an example of a hoax on the internet that you know about?_

_____

Critical thinking is important in the situation above and we need to use logic and reason. The first thing to think about is whether we trust the **source**. Do you know the person who posted the photo and can you trust them? How about the photo itself – who took it and how? Was it the person whose bike was being stolen? If so, why were they taking photos and not calling the police or stopping the thief?

_4    Do you ask yourself questions like these when you see things online?_

_____

When we use critical thinking we **analyse** or **evaluate** information. We don't only use our emotions, but we use **common sense** as well. We need to keep an open mind about things and look at them from different **viewpoints**. When surfing online, having a good memory helps because you remember which people or websites you can (and can't) trust. Critical thinking helps us learn from our experiences and stops us from repeating mistakes or sharing false information.

_5    Which websites do you trust? Why do you trust them?_

_____

**4**

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**2**  **Complete the following questionnaire.**

1  When you hear or read something, do you usually ...

a   accept the information as fact?
b   cross-check the information with other sources?

2  When you make decisions, do you rely mostly on ...

a   reason and logical thinking?
b   emotions and feelings?

3  Imagine you hear that someone you don't like has done something bad. Do you ...

a   question it in the same way you question everything?
b   believe it because you know the person is bad?

4  How quickly do you judge a situation?

a   I can always instantly decide.
b   I usually keep an open mind.

5  How easily can you tell if something you read or hear is fact or opinion?

a   It's difficult sometimes.
b   It's usually easy.

6  What is the best reason for buying a phone?

a   20 people you know have recently bought the same model.
b   10 people you know are still using that model two years after buying it.

7  Which statement is most logical?

a   A country with a weak economy cannot support large numbers of foreigners because there isn't enough money to pay for the basic needs of the people already living there.
b   All foreigners should be sent home because they are only interested in having a better life than they had in their own countries.

8  How can critical thinking skills help you with your studies?

_____

_____

_____

_____

_____

_____

_____

9  When do you do most of your critical thinking?

_____

_____

_____

_____

_____

_____

_____

10  Describe a time when critical thinking has been helpful to you.

_____

_____

_____

_____

_____

_____

_____

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## Worksheet B

**3**  **Read the sentences and match the underlined phrases with the meanings of *think*.**

1    <u>Think it over</u>. Let me know your decision tomorrow.

2    You haven't <u>thought it through</u>, have you?

3    I was going to reply to that post but I <u>thought better of</u> it.

4    You have to <u>think outside the box</u> if you want to find the solution.

5    What a great advertisement. I wonder who <u>thought that up</u>.

6    There's so much noise in here – I can't <u>think straight</u>.

a    Think in a different way

b    Think calmly and logically

c    Spend some time thinking

d    Invent or imagine

e    Change your mind

f    Think of all the possibilities

**4**  **In pairs or small groups, use the expressions from exercise 3 to discuss the following. Try to give examples from your own experience.**

1    How much time do you need before you make an important decision?

_____

2    Is it better to plan all your decisions carefully or to trust your emotions and common sense?

_____

3    How often do you change your mind about things? Are you usually glad you did?

_____

4    Are you a logical thinker? Can you easily think of different ways of doing things?

_____

5    Would you say you are an imaginative person?

_____

6    How are your concentration levels? When are you the most focussed? Can you think in a noisy environment?

_____

**5**  **How could these things help you think more critically? Discuss them with a partner.**

► Cross-check information you hear

► Don't judge situations too quickly

► Read more – build up your general knowledge

► Use reason rather than emotion

► Try to work on your personal prejudices and biases

► Play games and do puzzles that make you think

► Discuss things with others

► Evaluate different viewpoints

► Keep an open mind

► Always think about the source of information

► Question the reasons people have for saying/writing things

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**6**

**6    Read the information and do the task below.**

**Critical Path Analysis**

Critical thinking can help you plan things and be better organised. By using a method known as Critical Path Analysis (CPA), you can use critical thinking to make a difference in your life.

One way we use CPA is to find out how long something will take. Write down all the steps in the order that you need to do them. Then add the time each step should take. Add up the times and you will have your completion time.

*example*

**Critical Path Analysis for preparing a meal**
*You are cooking a meal for friends who are arriving at 9 p.m. You need to know what time to start.*

► Step 1: Go and buy the ingredients                Time 60 mins

► Step 2: Prepare the vegetables                    Time 30 mins

► Step 3: Cook food / Make a salad / Set the table   Time 120 mins

                                                    Completion time 210 mins (= 3½ hours)

Remember that you can do some steps at the same time (in this example, you don't need separate steps for making a salad and setting the table because you can do both while the food is cooking).

Subtract the total time from the time they are arriving (9 p.m. – 3½ hours). If you want the food to be ready when your guests arrive, the latest you should start Step 1 is 5.30 p.m.

**Now do the following task:**

**Critical Path Analysis for cleaning the house**
*Your have guests coming but the house is a mess. They will arrive at 6 p.m. There are a few things to do (you decide exactly what). They could include:*

► Cooking a meal for your guests            ► Drying clothes

► Washing clothes                           ► Taking out the rubbish

► Tidying the house                         ► Washing dishes

► Ironing                                   ► Cleaning the kitchen / bathroom / living room, etc

Write the steps in the order you need to do them. Add more steps if you need to. Write the times and calculate your start time.

Step 1: _____    Time _____

Step 2: _____    Time _____

Step 3: _____    Time _____

Step 4: _____    Time _____

Step 5: _____    Time _____

                                                    Total time _____

The latest you should start cleaning the house is _____