
Technical English

Basics

4. Auflage

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Vorwort

„Technical English – Basics“ wendet sich an Auszubildende in gewerblich-technischen Berufen. Darüber hinaus eignet es sich zum Einsatz in der Fachschule Technik, für Schulungen, in denen englisches Fachvokabular vermittelt oder reaktiviert wird, sowie zum Selbststudium.

In der vorliegenden **4. Auflage** wurden wiederum Verbesserungen und Anpassungen vorgenommen, die u. a. auf den konstruktiven Anregungen der Leser beruhen.

Basierend auf den Englischkenntnissen, die an allgemeinbildenden Schulen vermittelt werden, ermöglicht das Lehrbuch die Erarbeitung berufsfeldübergreifender sowie berufsspezifischer Inhalte. Dabei werden in den Bereichen Metall-, Kfz-, Elektro-, Computer-, und Umwelttechnik besondere Schwerpunkte gesetzt.

Berufsbezogene Sachtexte und Dialoge bilden in Verbindung mit zahlreichen „Activities“ eine wertvolle Grundlage für den handlungsorientierten Unterricht. Ein wichtiger Schwerpunkt ist die Schulung des **Leseverständnisses**, das für Auszubildende in gewerblich-technischen Berufen von zentraler Bedeutung ist. Die Schüler werden darüber hinaus dazu angeregt, sich über technische Zusammenhänge und Probleme auszutauschen und somit ihre mündliche und schriftliche **Kommunikationsfähigkeit** in der englischen Sprache zu verbessern.

Umfangreiche Vokabellisten sowie anschauliche Abbildungen bilden eine wesentliche Basis für das Verständnis auch komplizierter technischer Zusammenhänge.

Die englische Grammatik nimmt im Buch nur einen geringen Raum ein. Auf die Wiederholung von Grammatikstrukturen wurde verzichtet, um den Lehrenden dadurch nicht auf bestimmte Kapitel festzulegen. Statt dessen wurde in Ergänzung zum Lehrbuch ein Informations- und Arbeitsbuch zur englischen Grammatik entwickelt: **Technical English – Grammar** (Europa-Nr. 71880) vermittelt grundlegende Grammatikstrukturen, die mithilfe zahlreicher Aufgaben eingeübt und vertieft werden können.

Aufgrund seines konsequent verfolgten Konzeptes, nach dem praxisnahe Texte immer mithilfe mehrerer „Activities“ erarbeitet werden, ist Technical English – Basics auch zum Selbststudium und zur Vorbereitung auf Zertifizierungsprüfungen geeignet. Die Gesamtvokabellisten im Anhang (Englisch – Deutsch sowie Deutsch – Englisch) ermöglichen ein zügiges Nachschlagen der gesuchten Fachbegriffe.

Den Lernenden wünschen wir viel Freude und Erfolg bei der Aktivierung und Optimierung ihrer Englischkenntnisse. Wir bitten unsere Leser auch weiterhin um konstruktive Kritik und Anregungen, die zur Verbesserung des Lehrbuches beitragen.

Autoren und Verlag
Sommer 2010

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1

Visiting people abroad

In this unit you will learn something about a European exchange programme and you will get some information about Bristol.

Furthermore, you will learn how to introduce yourself and how to describe the way.

An exchange visit

“Travelling broadens the mind.” This sentence is certainly true. That is why the European Union offers a programme called LEONARDO which is designed to support exchange visits of trainees to other countries of the EU to help them to improve their foreign language skills and to get to know people from other countries.

A number of students from a vocational school in Hanover are on a trip to Bristol, their twin town in England.

The English hosts are waiting for their guests at Bristol Airport. John Granger and his parents are waiting for Frank Bartels, John’s exchange partner. After having collected his luggage Frank meets his hosts and they can drive home to the Grangers’ home in a suburb of Bristol.

The young Germans are all apprentices with a big car manufacturer and are learning in

different jobs in mechanical engineering. They receive their theory training at a vocational college once a week. This is called “vocational training in the dual system”.

The young English people are also trainees. They get their practical training at different firms in and around Bristol and attend day release classes at City of Bristol College.



Activity 1

Comprehension

Answer the following questions in complete sentences.

1. What is LEONARDO and what is it designed for?
2. What relationship do Bristol and Hanover have?
3. Where do Frank’s hosts live?
4. What jobs are the German apprentices training for?
5. What is a vocational training in the dual system?
6. Where do the English students get their practical training?
7. Where do the English trainees get their theory training?

Information about Bristol

Bristol is situated in the south west of England in the county of Avon, about 8 miles from the Severn Estuary, where the rivers Frome and Avon flow together.

In its long history the city of Bristol has been a shipping and trading centre. It was trading with Spain, Portugal, Iceland and ships from Bristol also supported the colonies in the New World. In

1497, John Cabot was financed by Bristol merchants to find a passage to the spice islands. He actually discovered Newfoundland.

Today Bristol has about 500,000 inhabitants and is an important industrial city. Bristol is also a lively city, with a very interesting and rich history. In and around Bristol there are a number of modern industries, including sugar refining, tobacco processing, cocoa and chocolate making, wine bottling and the making of fine glass, porcelain and pottery.

Many big names have chosen the city as their headquarters. British Aerospace e.g., a major aerospace and engineering group, and one of the world's leading air-craft builders design and construct their planes, including the wings of the Airbus A 380 airliner, in Filton, a suburb of Bristol. The famous British-French super-sonic Concorde was also built there.



Bristol has many beautiful buildings and landmarks that document of its former glory.

Among them are the beautiful Gothic cathedral St. Mary Redcliffe, built in the 13th century, and the famous Clifton Suspension Bridge, which spans the Avon Gorge at a height of 245 feet above the high water mark (see picture above). It is a beautiful example of the engineering skills of the famous engineer Isambard Kingdom Brunel (see picture on the left) who also constructed the first steel steam ship in the world.

Bristol is a multicultural city. All year round there are numerous activities and festivals e.g. of balloons and kites. Architecture and park land, business and new technology, theatres and museums, artists and animators, music and film are always worthwhile a visit. Bristol has been officially designated a 'Centre of Culture' and a 'Science City' by the Government.

Activity 2**Finding information in a text**

a) Look at the text above and write down some information about Bristol.

Start like this:

Bristol is situated in south-west England. ...

The following words and expressions may help you:

It is situated in ... it is a(n) ... city ... town ... it is twinned with ... it lies on ...
it has ...

b) Give some information about your home town or village.

You may use the expressions from activity 2 a) to help you.

Start like this:

I live in a village / town about ... km north / south of Its name is ...

Activity 3**Vocabulary**

Find words in the text about Bristol that fit these definitions.

1. the wide part of a river where it goes into the sea
2. the people who live in a town or village
3. the main place from which a company controls its activities
4. very large or important
5. plane or other vehicle that can fly
6. faster than the speed of sound
7. an area outside the town centre
8. ability to do something well
9. a bridge that is hung from strong steel ropes fixed to a tower
10. someone who designs bridges, machines etc.
11. a deep narrow valley with steep sides
12. you get this when water boils

Activity 4**Translation**

Translate the following sentences into English.

1. Bristol ist eine sehr lebendige Industriestadt im Südwesten von England.
2. Bristol hat eine lange Geschichte, die eng mit der Seefahrt verbunden ist.
3. Von hier wurden die Kolonien in Amerika unterstützt.
4. Heute hat Bristol eine halbe Million Einwohner und ist eine wichtige Industriestadt.
5. Ein bedeutendes Bauwerk ist die Clifton-Hängebrücke, die in einer Höhe von 245 Fuß den Fluss Avon überspannt.

Welcome to City of Bristol College

Introducing the situation

After the first night at his hosts' home in Filton Frank Bartels and the other German trainees meet their English partners at the City of Bristol College canteen and are welcomed by Mrs. Honeywell, the principal of the college.

Good morning. As the principal of City of Bristol College I'd like to welcome you here at Bedminster Centre. At the beginning I want to give you some information about our college. City of Bristol College is the third largest college in the UK. It was formed by the merger of "Brunel College" with "South Bristol College" and later with "Soundwell College". We provide an excellent education over a wide range of subjects. As well as full time courses, there are numerous



part time courses, ranging from plumbing to computer programming. There are also flexible study courses where students can choose the day and time to study, work at their own pace and have the support of the college tutors. Our students enjoy the lively adult learning environment and our student service provides support. Our College Green Centre contains excellent facilities and resources to support a wide range of courses and includes modern equipment, laboratories, and computers. In our

Learning Resource Centre nearly 50,000 books, a lot of magazines, journals, CD-ROMs, videos and PCs with full internet access are available. Our accomodation officer can help you to find suitable lodgings. Alternatively we are able to offer 70 friendly, affordable study bedroom units, only a five-minutes walk from our College Green Centre.

I hope you will enjoy your stay at our college and learn a lot while you work together with your partners. Furthermore I'm sure you will get to know each other well and have a good time together. And now you are all invited for a snack. As you can see, students from our home economics department have prepared a set buffet for you.

We'll meet again in room 305 at 12 o'clock to discuss the programme for the week. Please enjoy your meal. Thank you.

Activity 5

Answering questions

Look at the following questions on the text above and answer them in complete sentences.

1. Who is Mrs Honeywell?
2. How was City of Bristol College formed?
3. What facilities does the Learning Resource Centre of the college offer?
4. How does the college help students to find accommodation?
5. Who prepared the buffet for the trainees?
6. What do the trainees do after they have been welcomed?

Getting to know each other

Introducing the situation

After the principal, Mrs. Honeywell, had welcomed the students they go to the college canteen to have lunch. Frank sees an empty seat next to Eileen and asks her if he may sit down there.

FRANK Hello. May I sit down here?

EILEEN Yes, certainly. Wherever you like,

FRANK My name is Frank. I'm one of the German trainees. Nice to meet you.

EILEEN I'm Eileen. Nice to meet you. Where are you from, Frank?

FRANK I'm from Hildesheim in northern Germany, about 15 miles south of Hanover.

EILEEN I see. And what do you do in Hildesheim?

FRANK I'm a trainee industrial mechanic at VW in Hanover. I'm in the third year of my apprenticeship. And what do you do?

EILEEN I'm doing an NVQ course as a toolmaker. I work with a firm called "Click-Clock".

FRANK That's a funny name. What do they produce?

EILEEN They produce cardboard packaging machines.

FRANK That's interesting. You must tell me more about it later. Do you live here in Bristol?

EILEEN No, I live a few miles north of Bristol at a village called Easter Comptom. Who are you staying with?

FRANK I'm staying with John Granger. He lives in Filton and works with British Aerospace.

EILEEN Yes, I know. He is in my course.

FRANK Oh, it's almost 12 o'clock. I think we have to go to our room now. Can we meet again somewhere this afternoon?

EILEEN Sure.



Activity 6

Answering questions

Look at the following questions on the dialogue above and answer them in complete sentences.

1. Where does Eileen come from?
2. What does Eileen do?
3. What does the firm produce which Eileen works with?
4. Where does John Granger work?
5. Why do they have to go back to their room?

Activity 7**Introducing oneself**

After having had a snack the trainees come together again and introduce themselves to each other. Imagine you are one of the students and introduce yourself.

Tell the others your name, where you live, how old you are, what you do in your free time, etc.

The following words and expressions may help you:

My name is; I'm ... years old ; I live in ...; I'm training as a ...; I work at ...; I attend ...; I'm staying with ...; my hobbies are ...; I'm interested in ...; I want to become

Activity 8**Completing a dialogue**

Frank and Eileen have made an appointment for the afternoon. They continue their conversation at a café in town.

Fill in the missing parts in this dialogue

FRANK Hi there. Nice to see you again.

EILEEN Hi Frank. Did you enjoy the first day at college?

FRANK Well, not really, it was a bit boring.
What ...1 ?

EILEEN I'll have a cup of tea, please.

FRANK ... 2.

EILEEN No, thanks. I'm not hungry.
Now, Frank, have you ever been in England before?

FRANK Yes, ...3 , but I have never been to Bristol. And you? Have you ever been to Germany?

EILEEN No, ...4 . But, I'm thinking of travelling to Germany next year.

FRANK Really? Then you must come and see me and my parents.

EILEEN Well, I'd like to.

FRANK You told me you live at Easter Compton. ...5?

EILEEN No, I live with my parents.

FRANK ...6?

EILEEN My Dad is an engineer at British Aerospace and my Mum is a doctor's receptionist.

FRANK I see, and ...7?

EILEEN Yes, I have got a brother and a sister. ...8?

FRANK We own a detached house in a suburb of Hildesheim called "Himmelsthür" that's "heaven's door" in English.

EILEEN That's a funny name. ...9?

FRANK Yes, I have got a brother.

Have you already got any idea about what you are going to do after your apprenticeship?



EILEEN Well, I'm not sure yet, but I would like to go to university and study mechanical engineering. ... 10?

FRANK I want to study mechanical engineering, too. ... 11 ?

EILEEN Well, I think I'll stay here in Bristol, because the university is very good and I can live at home. ... 12?

FRANK I think I'll go to the Fachhochschule in Hildesheim.

EILEEN Fachhochschule? ... 13

FRANK I think it is a technical college of higher education in English.

EILEEN



Activity 9

Writing a dialogue

Now work with a partner and take the roles of Frank and Eileen and continue their dialogue.

You may talk about

age, details of the job, place of work, town, job training, travelling, programme of the week, going to the pub together, etc.

Present your dialogue to the class.

Activity 10

Writing a report

Write a report about the dialogue between Frank and Eileen in which you tell your friend about the two young people.

You may start like this:

Frank is a German trainee. He ...

Describing the way

Introducing the situation

Before Frank went to Bristol he had received a letter from his friends in Gloucester. They invite him to visit them while he is in England. In the letter they describe the way from Bristol to their new home in Gloucester.

June 20th, 20..

Dear Frank,

We were very pleased to hear that you are going to spend three weeks in Bristol. We would like to invite you to come and see us in Gloucester. We hope you'll find some time to visit us in our new house. To make it easier for you to find us, we'll explain the route to you in some detail.

I suppose you'll be able to find your way through Bristol to the motorway leading to the North.

First, take the M32 and drive towards the M32/M4 interchange. Then change to the M4 westbound. After about 5 miles you'll reach the M4/M5 interchange. Take the M5 towards the North and the Midlands. Leave the M5 at junction 12. You are now about three miles away from us. The slip road leads onto a country road. You can only go in one direction. At the roundabout after about 1/4 of a mile take the A38 towards Gloucester. After about another 1/2 a mile take the B4008 to Quedgeley. At the first roundabout that follows drive straight on. At the next roundabout stay on the B4008. Then turn left at the next traffic light.

You'll then come to a roundabout where you have to go straight ahead. And at a mini roundabout that follows after 200 m turn right into Elmore Lane. The next side road to the right is Peregrine Close. Turn right again. You're almost there. Our house is the last one on the right hand side.

We hope to see you on one of the Sundays while you are in Bristol.

Best regards
Harry and Joanne

Activity 11

Answering questions

Answer the following questions in complete sentences.

1. Why did Frank's friends send him a letter?
2. Which general direction does Frank have to go from Bristol to his friends' home?
3. Where does Frank have to leave the motorway?
4. How far is his friends' home from the motorway?
5. Where exactly do Frank's friends live?

When we describe the way from one point to another we often use imperatives to give instructions for directions and distances.

Translate the following German sentences into English.

1. Nimm die Autobahn in Richtung Norden.
2. Fahre bei der Auffahrt Nr. 14 nach Westen.
3. Biege an der dritten Ampel nach rechts ab.
4. Nach 2 km siehst du den Kreisverkehr vor dir.
5. Fahre in den Kreisverkehr und biege bei der zweiten Ausfahrt nach Cheltenham ab.
6. Folge dieser Straße ungefähr eine halbe Meile.
7. Fahre dann an der nächsten Ampel geradeaus weiter.
8. Biege bei der nächsten Ampel nach links ab.
9. Biege nach 200 m rechts in die Gloucester Road ein.
10. Sieh nach links und du wirst unser Haus sehen.

Preparing the trip to the North

Introducing the situation

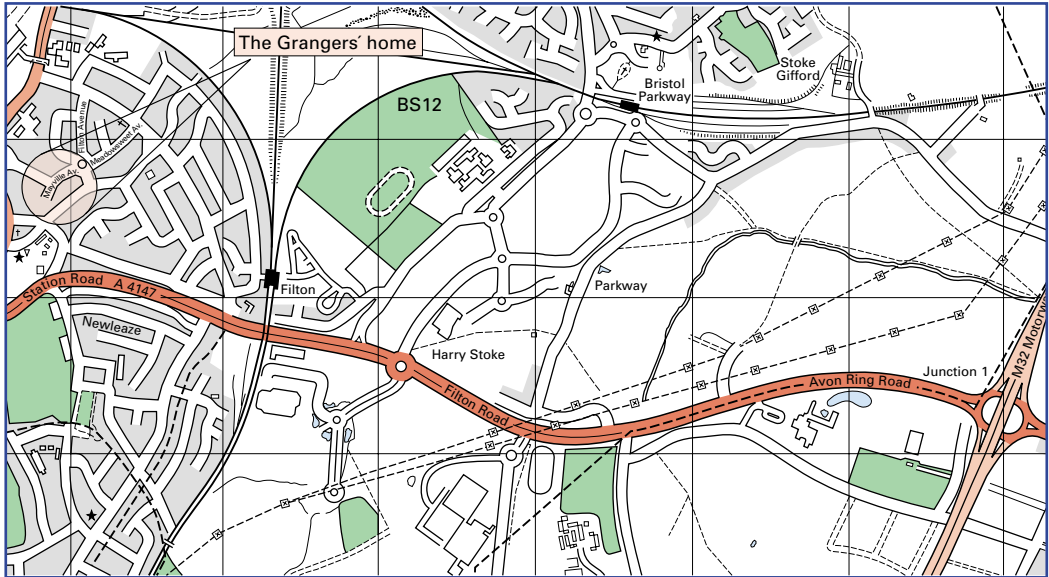
Frank tells John that he has got an invitation to visit his friends in Gloucester. He asks him for help to get there.

- FRANK** I have got an invitation to my friends' house in Gloucester. They sold their old house in Stroud last year and bought a new one a few months ago.
- JOHN** Oh, that's nice. When are they expecting you?
- FRANK** It should be on a Sunday, because they work during the week.
- JOHN** I see. Maybe we can arrange something for Sunday next week. Our family has got an invitation to my uncle's birthday party in Swindon. We'll go there in my father's car. So you may have my car and drive to Gloucester that day. What do you think about that?
- FRANK** Oh, thank you, that would be great. Can you also show me on the map how I get to the motorway?
- JOHN** Sure, no problem. Just a moment, I'll get a map to show you. ...
Well, let's see. This is Filton. We live here in Mayville Avenue and over there is the motorway.
- FRANK** What do you think, how long does it take to get to Gloucester?
- JOHN** About an hour, I would say. At the weekend there won't be much traffic on the motorway.

Activity 13

Describing the way

a) Look at the map clipping below and take John's part to describe the way from the Grangers' home to junction 1 on the M32. Remember, in England cars drive on the left hand side of the road.



b) Read the following instructions and find out where you arrive. You are driving on the M32 northbound.

1. Leave the M32 at junction 1.
2. Turn left into Avon Ring Road.
3. Drive straight on to Filton Road until you come to a roundabout.
4. Leave the roundabout at the third exit on the left.
5. Follow this road until you come to another roundabout.
6. At this roundabout go straight ahead.
7. Drive straight on until you see another roundabout in front of you.
8. Take the first exit on the left and you'll see the building on your right.

c) Describe the way from the M32 to Filton Station



Vocabulary Unit 1



ability
 above [ə'baʊ]
 access
 accommodation
 actually
 aerospace
 affordable
 ahead
 aircraft
 almost
 among [ə'mʌŋ]
 apprentice
 area
 to attend
 available
 base
 be situated
 be twinned with

 to boil
 to broaden
 cardboard
 century
 certainly
 to collect
 to construct
 to contain
 to control
 county
 crowded
 daily routine
 day release class
 department
 to describe
 to design
 different
 direction
 due to
 during
 easy
 enjoy
 environment
 estuary ['estʃʊəri]
 exchange programme
 to explain
 expression
 facility
 famous
 finally
 to finance

Fähigkeit
 oberhalb
 Zugang
 Unterkunft
 eigentlich
 Luftfahrt
 leistbar
 voraus
 Flugzeug
 beinahe, fast
 unter, bei
 Lehrling
 Gebiet, Gegend
 besuchen
 verfügbar
 Basis
 liegen an/in
 Partnerschaft haben
 mit
 kochen
 erweitern
 Pappe
 Jahrhundert
 gewiss, sicherlich
 einsammeln
 bauen
 enthalten
 steuern
 Grafschaft
 überfüllt
 Tagesablauf
 Teilzeitklasse
 Abteilung
 beschreiben
 entwerfen
 verschieden
 Richtung
 wegen, infolge
 während
 leicht
 genießen
 Umgebung
 Mündung
 Austauschprogramm
 erklären
 Ausdruck
 Einrichtung
 berühmt
 endlich
 finanzieren

fixed to
 flight controllers
 flow [fləʊ]
 foreign language
 former
 furthermore
 generous
 glory
 goods
 gorge [ɡɔ:dʒ]
 guest
 head office
 height
 high water mark
 history
 home economics
 host
 to imagine
 important
 to improve
 including
 inhabitant
 interchange
 introduce
 introduction
 to invite
 junction
 kind
 landmark
 lively
 luggage
 major ['meɪdʒə(r)]
 main
 manufacturer
 map
 maybe
 mechanical
 engineering
 merger
 narrow
 news
 numerous
 NVQ

 to offer
 the offer
 pace
 packaging
 to pay attention
 plane

befestigt an
 Fluglotsen
 fließen
 Fremdsprache
 früher
 darüber hinaus
 großzügig
 Glanz
 Güter, Waren
 Schlucht
 Gast
 Hauptsitz
 Höhe
 Hochwassermarke
 Geschichte
 Hauswirtschaft
 Gastgeber
 sich etwas vorstellen
 wichtig
 verbessern
 einschließlich
 Einwohner
 Autobahnkreuz
 einführen, vorstellen
 Einführung
 einladen
 Anschluss
 freundlich
 Wahrzeichen
 lebendig, quirlig
 Gepäck
 Haupt-
 hauptsächlich
 Hersteller
 Landkarte
 vielleicht

 Maschinenbau
 Zusammenschluss
 eng, schmal
 Nachrichten
 zahlreich
 National Vocational
 Qualification
 anbieten
 Angebot
 Schritt
 Verpackung
 aufpassen
 Flugzeug



Vocabulary Unit 1



pleased
 pleasure
 plumbing
 porcelain ['pɔ:səlɪn]
 pottery
 practical
 to prepare
 principal
 to produce
 to provide
 purpose
 range
 relationship
 relatives
 to remind
 resource
 rope
 roundabout
 set buffet
 sight seeing trip
 skill
 slip road
 sound
 to span
 speed of sound
 to spend
 to stay
 steamship
 steel
 steep

erfreut
 Vergnügen
 Klempnern
 Porzellan
 Töpferwaren
 praktisch
 vorbereiten
 Direktor(in)
 herstellen
 bereitstellen, bieten
 Zweck
 Bereich
 Verhältnis
 Verwandte
 erinnern
 Quelle
 Seil
 Kreisverkehr
 kaltes Buffet
 Stadtrundfahrt
 Können, Geschick
 Autobahnzubringer
 Schall
 überspannen
 Schallgeschwindigkeit
 verbringen
 bleiben, wohnen
 Dampfschiff
 Stahl
 steil

straight on
 subject
 suburb ['sʌbɜ:b]
 sugar refining
 to suggest
 supersonic
 to support
 to suppose
 surprised
 theoretical training

 tired
 tobacco processing
 toolmaker
 towards [tə'wɔ:dz]
 trading centre
 traffic light
 trainee
 training
 translation
 trip
 twin town
 unusual [ʌn'ju:ʒl]
 vehicle ['vi:ɪkl]
 village
 to visit
 vocational school
 to welcome
 wherever
 westbound

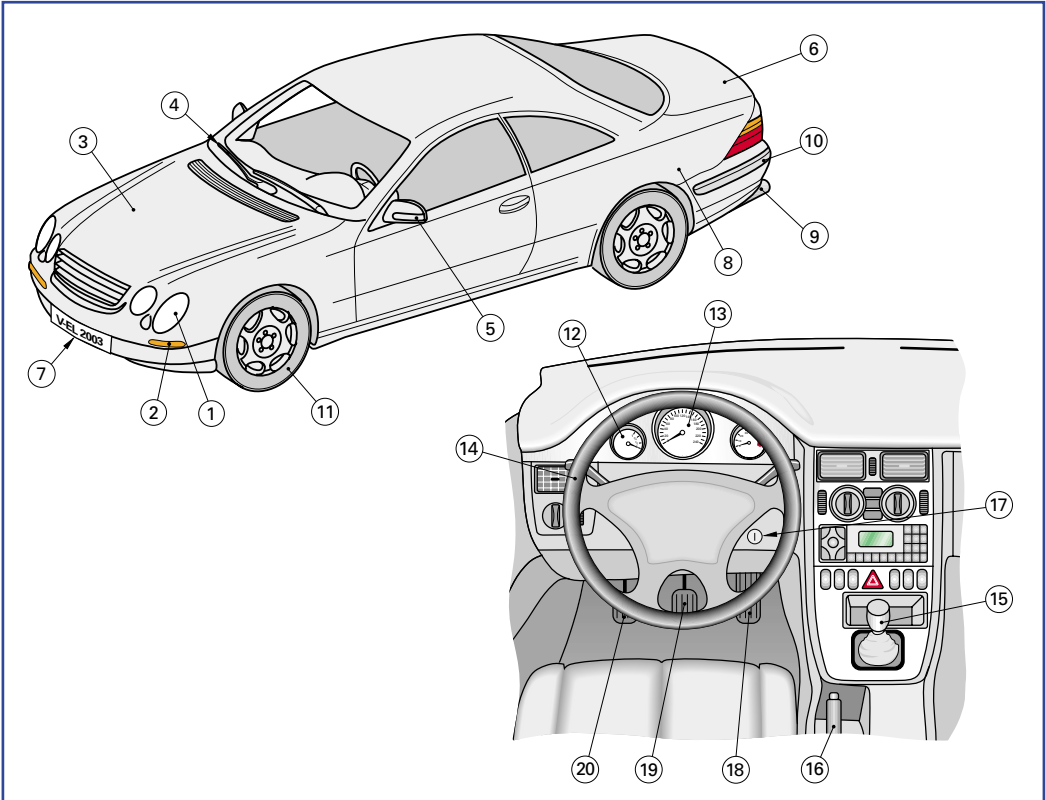
geradeaus
 Unterrichtsfach
 Vorort
 Zuckerherstellung
 vorschlagen
 Überschall-
 unterstützen
 vermuten
 überrascht
 theoretische
 Ausbildung
 müde
 Tabakverarbeitung
 Werkzeugmacher
 nach
 Handelszentrum
 Ampel
 Auszubildender
 Ausbildung
 Übersetzung
 Reise
 Partnerstadt
 ungewöhnlich
 Fahrzeug
 Dorf
 besuchen
 Berufsschule
 willkommen heißen
 wo auch immer
 nach Westen

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Cars and Tools

In this unit you will learn something about cars and many English expressions for parts of the car. You will also learn how various tools are named in English.

Parts of the car



Activity 1

Which car parts do you know?

Match the following car parts to the numbers given in the picture. Translate the words into German.

Here are the English words:

tyre ... bonnet ... windscreen wiper ... boot ... number plate ... indicator ... bumper ... headlight ... exhaust pipe ... wing ... wing mirror ... handbrake ... gear stick ... speedometer ... fuel gauge ... steering wheel ... ignition switch ... clutch ... brake pedal ... accelerator

Is it the alternator?

Introducing the situation

Keith Graham is in the second year of his apprenticeship as a car mechanic at Drake's Garage in Torbay. One day, after having finished his regular work, he is trying to mend his own car which has got a flat battery. Keith's friend Frank is helping him.



- KEITH** Please hand over the 11/16 inch ring spanner. I first have to loosen the fan belt.
- FRANK** Are you sure that it's not the battery? ... Here you are.
- KEITH** Thank you ... Yes, I am. I've changed the battery twice. This is a brand new one but it's flat again. So it must be the alternator.
- FRANK** There could also be a short circuit in the electric system.
- KEITH** I don't think so. If there were a short circuit, a fuse would blow ... I need the ratchet and a 1/2" socket.
- FRANK** Here you are. But have you checked all the relays? As far as I know defective relays can also unload the battery.
- KEITH** I've checked them all. I'm sure, it's the alternator. When the battery was flat for the first time two weeks ago, my neighbour Mr Flint helped me with a jump start. It worked, but if you don't do it correctly it can damage your alternator. I'm afraid this has happened with mine ... Please give me a Phillips screwdriver.
- FRANK** A new alternator is quite expensive, isn't it?
- KEITH** Yes, it is. But first we will just check the regulator, you know, it's a part of the alternator. If we are lucky, we just have to change that. Otherwise, I will try to get a used alternator somewhere from a scrap yard.