

## Transportation

### TREND TASK

**Approach:** One to one

**Focus:** Finding information in an encyclopedia.

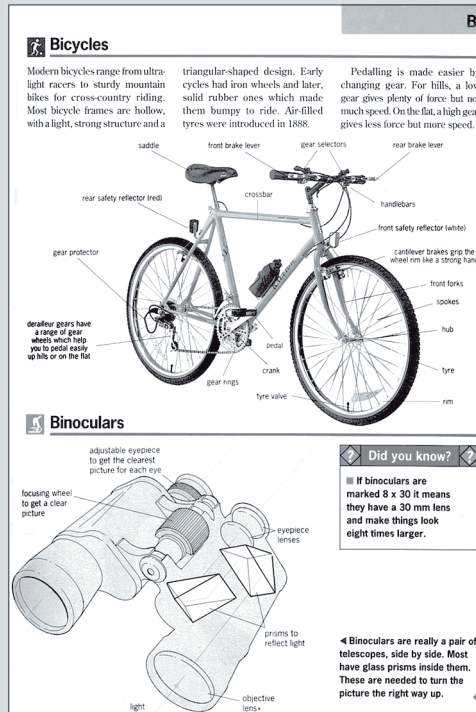
**Resources:** Oxford Children's Pocket Book of Knowledge, recording book.

**Level:** Year 8

### Questions/ instructions

In this activity I want to know how you go about searching for information. Imagine your class is doing a project on transportation. Each person in the class has different information to use.

Your information is this book, the *Oxford Children's Pocket Book of Knowledge*.



### Motor cars

There are more than 400 million cars in the world today. The first petrol-driven cars were made in Germany in the 1880s. But early motoring was expensive, until Henry Ford in America began to mass produce a cheap

reliable car, the Model T, in 1907. A car has over 20,000 parts, grouped into four main sections: the body, the engine, the transmission system and the controls.

The world's largest car is a limousine which is over 30 m long. It has 26 wheels and a swimming pool. It is used mainly for films and exhibitions.

▼ 1958 Cadillac Biarritz



#### Suspension

This joins each wheel to the car and helps the car to go over bumps smoothly. Shock absorbers in the suspension stop the car bouncing up and down.

#### Steering

The steering wheel is connected to the wheels by a steering box and two rods which move from side to side.

#### Electrics

A battery provides electricity for the starter motor and spark-plugs when starting the engine. It also powers the lights and the radio. Once started, the engine drives an alternator which powers the lights and plugs and recharges the battery.

#### Driveshafts

These are metal rods which transmit the turning force from the engine and the gearbox to the wheels. This car has front wheel drive. Some cars have rear wheel drive and others have four-wheel drive.

#### Gearbox and clutch

Most cars have four or five forward gears and one reverse gear. When you press a foot pedal, the clutch disconnects the engine from the gearbox while you change gear.

#### Cooling system

The cooling system pumps water around the engine to stop it overheating. The hot water is then pumped through the radiator where it is cooled by a rush of air or by a fan.

#### Engine

Most cars have an internal combustion engine which burns either petrol or diesel fuel. Some cars have the engine at the rear.

#### Brakes

These are attached to the wheels and suspension. The foot-brake pedal works on all four wheels. The hand brake works on two wheels and is used for parking. Most cars have disc brakes at the front and drum brakes at the back.

Hand student the book.

Have a look at the book to see how the information is set out and organised.

1. Can you explain to me how the information is set out and organised?

alphabetically by topic

69 (69)

Sometimes when you look for information it's not under the heading that you first try, so you have to think of other headings or words to look up.

If you want to know how to spell a word, ask me and I will help you.

*If the student doesn't ask for assistance with spelling, DO NOT GIVE IT.*

2. Some people use bikes for transport. Tell me what you would look up first to find information on bikes?

Now look there. What did you find?

If student doesn't find it because they're on the wrong page:

PROMPT Are you sure?

found information on bikes

91 (91)

% responses

2001 ('97)  
year 8

3. There is information in this book about cars. Tell me what you would look up to find information on cars? Now look there. What did you find?

If information is NOT there:

PROMPT Do you want to try another word?

PROMPT What did you find?

Repeat process until successful or student asks to stop.

found information on cars

28 (46)

tried 4 or more topic words

21 (55)

### Commentary

Information on cars was difficult to find (under topic "Motorcars"). The 2001 students were less persistent than the 1997 students, and thus less successful. There was no performance difference on the other two questions.