How much tax does a typical worker pay? In this activity you will work out how much income tax workers pay on the money they earn.

# Information sheet A Income Tax 2017 – 18

Income Tax is paid on 'taxable income' above a certain level.

# How to calculate income tax

Find the worker's taxable income by subtracting their personal tax allowance from their annual income. The standard personal tax allowance is £11 500.

# Basic rate

Income tax is paid at 20% on the first £33 500 of taxable income. **Higher rate** Income tax is paid at 40% on taxable income from £33 501 to £150 000. **Additional rate** Income tax is paid at 45% on taxable income above £150 001. (Note all incomes used in this activity are below this value).

## Example

Katie earns £400 per week. Her personal tax allowance is £11 500.

Katie's annual income =  $\pm 400 \times 52 = \pm 20800$ Katie's taxable income =  $\pm 20800 - \pm 11500 = \pm 9300$ Income Tax = 20% of  $\pm 9300 = \pm 1860$  per annum

Think about...

Think about...

What methods could you use to work out 20%?

What methods could you

use to work out 40%?

### Example

Liam earns £58 600 per annum. His personal tax allowance is £11 500.

Liam's taxable income =  $\pm 58\ 600 - \pm 11\ 500 = \pm 47\ 100$ Tax paid at basic rate = 20% of  $\pm 33\ 500 = \pm 6700$ Tax paid at higher rate = 40% of ( $\pm 47\ 100 - \pm 33\ 500$ ) = 40% of  $\pm 13\ 600 = \pm 5440$ Total income tax per annum =  $\pm 5440 + \pm 6700 = \pm 12\ 140$ 

### Think about...

What income tax will Liam pay each month?





## Information sheet B

### **Typical earnings**

The table gives typical annual earnings for a variety of jobs in 2017:

dof	Typical salary (per annum)
Accountant	£49 850
Bank manager	£46 000
Bus driver	£24 900
Dancer	£20 700
Dentist	£82 500
Doctor	£84 500
Electrician	£29 500
Hairdresser	£21750
IT project manager	£61950
Labourer	£19 350
Member of Parliament	£76011
Nurse	£33 000
Office administrator	£22 300
Pilot	£83 800
Retail sales assistant	£19750
Supermarket manager	£63 500
Television presenter	£46 900
Truck driver	£29800
Vehicle mechanic	£22 500
Waiter/waitress	£16 200

#### Think about...

Which of these jobs would you be interested in?

#### Think about...

What do you need to assume to work out the income tax they will pay?

### **Try these**

**1** Sam earns £2275 per month. His personal tax allowance is £11 500.

Complete the calculations below to work out how much income tax Sam pays in 2017-18.

Sam's annual income = .....

Taxable income = .....

Income tax at the basic rate = 20% of ..... = .....

2 Meera earns £79 800 per annum. Her personal tax allowance is £11 500.

Complete the following calculations to work out how much income tax Meera pays in 2017-18.

Taxable income = .....

Income tax at the basic rate = 20% of ...... = ......

Income tax at the higher rate = 40% of .....

= .....

Total income tax = .....

3 Choose two or more jobs from Information Sheet B. Calculate the amount of income tax each worker pays. Write a brief summary of your findings.

#### At the end of the activity

- Does a person who earns £30 000 per year pay twice as much tax as someone who earns £15 000 per year?
- Sketch a graph of income tax against taxable income. Is income tax proportional to taxable income?
- How much do you need to earn before you become a higher rate tax payer?
- Sketch a graph of income tax against annual earnings for earnings up to £100 000.
  How does the steepness of the line segments relate to the tax rates?