

## Lesson 6: New Medicines

### Teachers' notes

#### Starter

Students are given the sheet that shows some views from people associated with the thalidomide drug: a sufferer, his mother, a doctor and a scientist. In groups of four, they are required to decide whether more could have been done to prevent thalidomide causing limb defects. If desired, this could be done as a role-play choosing four students from the class to read out the statements.

#### Main Activity

##### Task 1: Medicines - Testing and using a new drug

In pairs, students are required to sort out the statements, arranging them in chronological order. The statements could be copied and laminated onto cards and a set of cards distributed to each pair. The correct sequence is given below:

7, 2, 5, 1, 13, 3, 10, 4, 6, 14, 15, 9, 11, 12, 8

**Task 2:** Optional task for quicker groups. The number and types of organisms used in testing have to be matched. There is no way for students to deduce the correct order: it is an 'educated guess'. They can pencil in their ideas, and, if time permits, amend when given the correct answer. Could be done as a whole class activity by using an OHT copy of the task. This should emphasise that only in the later stage of screening are higher mammals used.

The correct answers are:

Animals	Numbers used
Mouse	1,655,766
Rat	489,613
Fish	170,459
Bird	125,605
Other Rodent	60,521
Rabbit	23,356
Hoofed mammal	20,013
Amphibian	9,648
Carnivore	8,273
Primate	3,342
Other mammal	776
Reptile	341
<b>TOTAL</b>	<b>2,567,713</b>

**Task 3:** Students are required to draw a table with two columns, one with the heading 'yes', the other with 'no' then decide whether the statement suggests that animal testing does or doesn't work. They then either copy the statements into the correct column or cut and stick them in place.

*Correct answers: YES – A,E,F,D. NO: - B, G, H, C.*

### **Task 4:** Animal testing - What are the alternatives?

Students work in groups of three or four. There is enough information for 9 groups although by giving a group more than one card of information, the task can be matched to whatever number of groups are in the class. The information sheets should be copied and laminated beforehand. The students work in their group (let's say of four). Then: read over their information sheet (2-5 min), summarise the information (on A3 sheet) using diagrams, symbols BUT only 20 words (10 min), three members of their group move to three other groups to be taught about another part of the alternatives to animal testing-they record notes on worksheet 2. The fourth member stays to teach three members from other groups (5 min). The students continue to move around the room until all of the other groups have been visited (10-15 min). Students return to their original group to teach each other about what they've learnt. All should have completed worksheets.

### **Plenary**

**Tasks (5(a) and 5(b))** – depending upon time and ability either or both can be chosen. Could be as photocopies for students to complete or on OHT as a whole class activity.