

# Lesson Plan: Oxygen Therapy

## Teacher Guide

**Topic:** Describing oxygen therapy

**Timing:** 45 minutes

**Lesson type/focus:** speaking, reading, vocabulary and writing

### Aims:

- **Speaking:** discuss and practise language for oxygen therapy
- **Reading:** read for specific information
- **Vocabulary:** learn and review language for oxygen therapy
- **Writing:** practise organising and presenting information

### Overview

The focus of the lesson is describing oxygen therapy. The speaking activity introduces the topic and gives students the opportunity to share their ideas and experience. The reading activity contextualises some of this language and practises reading for specific information. The vocabulary activities introduce/review key vocabulary. The writing activity uses language from the lesson and to produce a piece of patient/carer-centred writing.

**Note:** This lesson supports the language introduced in the following:

- Course, '[English for Nurses](#)'.
- Unit: 'Breathing Difficulties'
- Module: 'Breathing equipment' pages 8 and 12

## Teaching notes and answer key

### Part 1: speaking

Put students into pairs or small groups and ask them to discuss questions 1–4 on the student worksheet. Encourage them to share examples from their own experience.

Do whole class feedback to discuss and share answers.



**Suggested answers**

1. What sort of equipment is used to deliver oxygen?

*oxygen cylinders*

*oxygen masks, nasal cannulae (nasal prongs)*

2. What should nurses explain about the use of oxygen to their patients?

*no smoking around the oxygen cylinder (relevant for home oxygen)*

*check the oxygen level in the cylinder every day to make sure oxygen not running out  
only use the amount of oxygen prescribed, oxygen flow rates that are too high can be dangerous*

*make sure oxygen tubing is clear of debris, change if necessary*

*make sure correct size of mask is used so it fits snugly*

*check elastic straps don't chafe around ears, can cause pressure ulcers*

3. When might patients need to be given oxygen?

*only if they are hypoxic (have low levels of oxygen in the blood), e.g. if they are critically ill, after cardiac arrest*

4. What are these pieces of equipment and what are they used for?

*nasal cannulae: device which delivers oxygen through the nostrils: flexible tubing with one end which splits into two prongs which sit within the nostrils and the other end which is attached to an oxygen supply*

*hyperbaric chamber: enclosed space in which almost pure oxygen is breathed in higher-than-normal air pressures so that oxygen levels in the body can be increased significantly.*

**Part 2: reading**

Have students work in individually, or in pairs, to read the text to find the answers to questions 1–6. Tell students to concentrate on finding the answers rather than any words they don't know at this stage.

Go through the answers as a class.

Have students read the text through again individually and highlight any new words. Deal with any vocabulary queries.

**Answers**

1.c 2.c 3.b 4.b 5.a 6.c

**Extension activity**

Review the meanings of medical prefixes *hyper-* and *hypo-*.

**hypo-**: low, depressed levels of, reduced

Note: hypo- + word/ word part which starts with *o* becomes hyp-

**hyper-**: high, excessive amounts of, increased

Have students identify the medical terms in the text with the prefixes *hypo-* and *hyper-* (hypoxia, hyperbaric).

Then have them work in pairs to write down other medical terms which also use these prefixes. Ask them to explain what they mean.



**Suggested answers**

<b>hypo-</b>	<b>hyper-</b>
hypoxia	hyperbaric
<i>hypothermia</i>	<i>hyperthermia</i>
<i>hypotension</i>	<i>hypertension</i>
<i>hypoglycaemia</i>	<i>hyperglycaemia</i>

**Part 3: vocabulary**

A. Have students work individually to write the terms below the pictures.

Go through the answers as a class.

**Answers**

1. flow meter 2. flow regulator 3. pressure gauge 4. on/off valve 5. oxygen cylinder  
6. warning label

B. Have students work individually, or in pairs, to put the instructions and advice into the correct category. Tell them to use the pictures to help them decide.

Go through the answers as a class.

**Answers**

<b>oxygen mask</b>	<b>nasal cannulae</b>
<i>tighten the straps</i>	<i>goes into your nostrils</i>
<i>put over your nose and mouth</i>	<i>can cause dry nostrils</i>
<i>adjust the nose clip</i>	<i>put tubing around ears</i>

**Part 4: writing**

Explain the activity and have students work in pairs or small groups to write instructions on how to use an oxygen cylinder. Tell them to use the prompts as a starting point for their instructions.

Stage the task and support students as needed. Make sure they write the instructions using clear language which a carer can follow.

You could set the activity for homework and have students read each other's instructions in the next class. Alternatively, allow enough time in this lesson for writing and sharing their work.



**Suggested answers**

*Before you start, look at the pressure gauge to check the oxygen level in tank.*

*If the oxygen tank is empty, change the cylinder.*

*Now, attach one end of the oxygen tubing to the oxygen outlet on the cylinder.*

*Next, attach the other end of the tubing to the end of an oxygen mask.*

*Then place the oxygen mask over the patient's nose and mouth.*

*Make sure that you tighten the straps around the patient's head, so the mask is a snug fit.*

*Open the on/off valve to start the oxygen flow.*

*Adjust the flow rate of the oxygen using the flow rate regulator (by turning the flow rate regulator) to a rate of 3L/min (3 litres per minute).*

*Finally, put a warning sign near the patient and warn that smoking is not allowed near the oxygen cylinder.*

For lower-level groups, you could set a gap fill activity (see suggestion below). They could then create a simple poster using the language and the pictures from the lesson.

Before you start, look at the pressure gauge to **(1)** \_\_\_\_\_ the oxygen level in tank.

If the oxygen tank is empty, **(2)** \_\_\_\_\_ the cylinder.

Attach one end of the oxygen tubing to the oxygen outlet on the cylinder.

Next, **(3)** \_\_\_\_\_ the other end of the tubing to the end of an oxygen mask.

Then **(4)** \_\_\_\_\_ the oxygen mask over the patient's nose and mouth.

Make sure that you **(5)** \_\_\_\_\_ the straps around the patient's head, so the mask is a snug fit.

Open the on/off valve to **(6)** \_\_\_\_\_ the oxygen flow.

**(7)** \_\_\_\_\_ the flow rate of the oxygen using the flow rate regulator (by turning the flow rate regulator) to a rate of 3L/min (3 litres per minute).

Finally, put a warning sign near the patient and **(8)** \_\_\_\_\_ that smoking is not allowed near the oxygen cylinder.

**Answers**

1.check 2.change 3.attach 4.place/put 5.tighten 6.start 7.Adjust 8.warn

**Extension activity**

Have students write simple instructions for another procedure, for example putting an oxygen mask and/or nasal cannulae onto a patient.



## Student Worksheet: Oxygen Therapy

### Part 1: speaking

Discuss questions 1–4 with your partner or group.

1. What sort of equipment is used to deliver oxygen?
2. What should nurses explain about the use of oxygen to their patients?
3. When might patients need to be given oxygen?
4. What are these pieces of equipment and what are they used for?



### Part 2: reading

Read the text to find the correct ending to complete the sentences 1–6.

#### Oxygen Therapy

Oxygen therapy is the administration of oxygen to treat or prevent hypoxia. Hyperbaric oxygen is oxygen which is delivered under high pressure. It is used to treat decompression sickness for divers who surface too quickly, for example. Oxygen can be administered by mask or nasal cannulae. Hyperbaric oxygen is delivered in an airtight chamber with oxygen under pressure.

The body takes in oxygen and releases carbon dioxide continuously. If oxygen levels in the blood drop, the patient needs extra oxygen. Oxygen saturation levels may decrease because of illness or injury.

In hospitals, oxygen is often supplied to each patient through outlets in the wall. A flow meter is attached to the wall outlet so the flow rate of the oxygen can be adjusted.

Oxygen can also be delivered to patients at home. The oxygen is supplied to patients in a cylinder with oxygen tubing carrying the oxygen to the patient. Patients who use home oxygen often use nasal cannulae rather than oxygen masks as the nasal cannulae allow them to eat and talk while receiving oxygen.



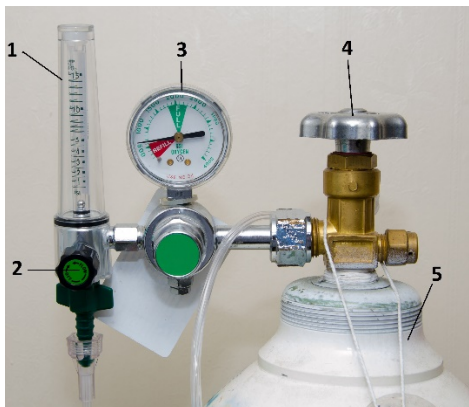
1. Oxygen is administered in cases of \_\_\_\_\_ or low oxygen levels.
  - A. hyperbaric
  - B. hypo
  - C. hypoxia
2. Divers get decompression sickness if they
  - A. swim at the surface of the water.
  - B. stay in the water too long.
  - C. come up to the surface of the water too quickly.
3. Oxygen can be given to a patient through
  - A. an oxygen cylinder.
  - B. an oxygen mask.
  - C. decompression.
4. A patient's oxygen levels may decrease if they
  - A. breathe in too much.
  - B. are ill or have had an injury.
  - C. breathe in too much carbon dioxide.
5. A flow meter shows how much oxygen
  - A. is flowing out of the outlet per minute.
  - B. flows into the wall outlet.
  - C. a patient needs.
6. Patients who need continuous oxygen often use \_\_\_\_\_ so they are free to talk.
  - A. small oxygen masks
  - B. oxygen masks at night
  - C. nasal cannulae



**Part 3: vocabulary**

A. Match the oxygen equipment to the correct picture (1–6). Write the words under the picture.

flow meter   flow regulator   on/off valve   oxygen cylinder   pressure gauge   warning label



- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_
- 5. \_\_\_\_\_

- 6. \_\_\_\_\_

B. Look at the pictures of an oxygen mask and nasal cannulae. Put the instructions and advice for using them into the correct group.



goes into your nostrils  
put over your nose and  
mouth

put tubing around ears  
tighten the strap

oxygen mask	nasal cannulae

#### Part 4: writing

You are going to work with your partner to write instructions on how to use an oxygen cylinder. Use the prompts and the pictures in the lesson to help you.

- check pressure gauge / oxygen level in tank.
- oxygen tank empty / change cylinder
- attach one end tubing/ oxygen outlet/ cylinder.
- attach other end / end of oxygen mask
- oxygen mask / over nose and mouth
- tighten straps around head / snug fit
- open on/off valve / start oxygen flow
- adjust flow rate / flow rate regulator / rate / 3L/min (3 litres per minute)
- warning sign / near patient / smoking not allowed / oxygen cylinder

