

Dosage and timing

LEARNING OUTCOMES

- To understand where to find information on labels
- To understand and interpret the directions for taking the medicine



RESOURCES

- Copies of Resources 1, 2, 4–6
- Cards showing paraphrased instructions from Resource 2 (Activity 1 ESOL)
- Person and Dosage cards prepared from Resource 3
- Empty packaging and containers from a variety of tablets, mixtures, drops, powders, creams, etc.
- 5 ml medicine spoon, 5/2.5 ml medicine spoon, medicine measuring cup

- Water or sand (for practice in using medicine spoons)
- Beads or buttons to represent tablets (Activity 3 Support)
- Analogue clock (real or play)

RELATED TOPICS

Checking medicine labels (Theme 12, Topic 4)

Remembering spoken instructions (Theme 12, Topic 3)

HEALTH SKILLS

Taking a medicine incorrectly can affect the way the drug works or may cause side-effects. Patients should tell their doctor or pharmacist if they have any side-effects from using the medicine or if they have any of the contraindications listed on the medicine labels or patient information sheets. Medicine labels and packets give important information about how much medicine to take and how often to take it. They also contain a lot of specialist words or phrases that need to be understood in order for the instructions to be followed correctly.

This topic deals with following dosage instructions. It leads on from the previous topic 'Checking medicine labels'. Remind learners that prescription medicine must not be given to anyone other than the person it has been prescribed for.

FUNCTIONAL SKILLS

In order to follow dosage instructions correctly, learners need to be able to:

- find information on medicine labels about dosage and timing
- recognise and follow instructions on medicine labels
- work out the timings for taking the medicine.

Functional Skills/Core Curriculum

Activities in this topic will contribute to learning in the following curriculum areas:

- locate key information on different medicine labels **English** E3.12 (L/Rt/E3.5)
English E3.9 (L/Rt/E3.7)
- read and follow directions in detail **English** E3.10 (L/Rt/E3.8)
- understand typical language related to taking medicine **English** E3.9 (L/Rt/E3.3)
- work out the maximum of doses allowed **Maths** E3.3 (N/N1/E3.6)
- work out when to take doses over the period of a day **Maths** L1.20 (N/MSS1/L1.3).

- Discuss the meaning of 'instruction' with learners.
- Give learners a number of instructions and information taken from real medicine bottles/labels. For example:
 - dissolve in water
 - pour one sachet into a mug and add hot (not boiling) water
 - contains paracetamol
 - take with food
 - soothing effective relief for sore throats.
- Ask learners to identify the instructions and explain how they can tell. Point out that these instructions start with an action – something you need to do (e.g. 'take', 'dissolve', 'pour').

When you take a medicine, where do you get the instructions?

How do you recognise an instruction?

What sort of information would you expect to find on the medicine label or packet?

ACTIVITY 1

Identify specific instructions about taking the medicine

- Look together at Resource 1 and read the introductory sentences. Discuss the sort of information on a medicine label or packet that tells you how to take the medicine, referring learners to the text in the coloured bubbles. Ask learners to find the information on the medicine packet on Resource 2, as if they were going to take the medicine themselves. They should then copy some of the text or a subheading from the relevant part of the instructions into the blank boxes on Resource 1.
- Discuss the meanings of typical words and phrases, such as 'if symptoms persist, consult your doctor'.
- Ask direct questions that require learners to select information from the instructions (e.g. 'How many days can you take these tablets for?' 'What is the most tablets you could take each time?').
- Point out that they should follow the dosage given unless a doctor or pharmacist has advised them otherwise. Emphasise to learners that they can always get advice from their doctor or pharmacist about taking medicines.

Support

- Learners may require support to interpret the instructions where the language is formal or they are given a choice (e.g. one or two tablets).
- Suggest to learners that they highlight the relevant part of the instruction before copying text or a subheading such as 'dosage' onto Resource 1.
- Check learners' understanding of the language used.

ESOL

To check that learners can understand instructions, provide cards that paraphrase the information on Resource 2 in everyday language. Learners can work with the cards in pairs, highlighting information on the packet that has the same meaning (e.g. You shouldn't take the medicine for more than 7 days = Do not take for more than 7 days; Keep medicines where children can't see them or reach them = Keep out of sight and reach of children).

ACTIVITY 2

Explore the language of dosage instructions

- Ask learners to find the part of the packet on Resource 2 that tells you how many tablets to take. Point out that the word 'dosage' is often used on medicines to tell you how much to take.

What does the term 'dosage' mean?

- Point out that the instructions are divided into different age groups. Write '9–12 years' on the board/flipchart and ask learners what it means. Make sure they are aware that the dash means 'to'. Ask questions to check learners' understanding of the instructions (e.g. 'How many tablets should you give an 11-year-old child?' 'Are these tablets suitable for toddlers?'). Do not include the negative instruction at the end just yet.
- Now discuss the negative instruction, including the meaning of the phrase 'not suitable for'.
- Draw learners' attention to the warning section. Explain that this describes situations in which the medicine should not be used (contraindications). Ask learners to say what these situations are. Write them on the board or flipchart and discuss why it is not advised or may be unsafe to take the medicine in these situations. Point out to learners that this type of advice is likely to be found on any medicine packaging. If appropriate, explain that pregnant and breastfeeding women are advised not to take any medicines without talking to their doctor first. It does not mean that the drug is dangerous. Similarly, some drugs don't work if they are taken together – this is potentially more dangerous. Often more detailed information can be found in the patient information leaflet provided with the medicine.
- To complete this section and confirm understanding, give learners the person (P) cards prepared from Resource 3. Learners can give the doses allowed for each person on the cards verbally, or match up the information using the dosage (D) cards.

What does the term 'not suitable for' mean?

Why is it important to read and understand the warning section?

Support

- Read out information from the medicine packet on Resource 2 and ask direct questions about it.
- Support learners as they match the dosage to the person using the person and dosage cards and referring to the medicine packet on Resource 2.

ESOL

- Make sure learners understand the words and phrases on the dosage cards that relate to the number of tablets to take (e.g. 'no', 'half', 'one or two') and the frequency for taking them (e.g. 'four times a day', 'up to four times a day').
- Set up pairs to practise asking for and giving information about dosages. 'How many tablets can (you) take a day?' 'Up to four a day, but no more.'

ACTIVITY 3

Work out the maximum number of doses that can be taken

- Make sure learners understand the word 'maximum'.
- Go through an example with learners of how to work out the maximum number of tablets that can be taken in a day – the largest number allowed multiplied by the number of times it can be taken. For example, 2 tablets to be taken 4 times a day gives a maximum of $2 \times 4 = 8$.
- Give further examples of dosages and ask learners to work out the maximum number of tablets per day.
- Resource 4 provides further practice in working out maximum doses.

How do you work out the maximum when it says two or three tablets?

What about if it says three or four times a day?

- Discuss the measure of 5 ml. Point out to learners that you often get a plastic spoon or a measuring cup with the medicine. Show examples of these and let learners examine them. Ensure learners understand the different measures provided by a 'double-ended' spoon. Also point out that some spoons have 2.5 ml marked on the bowl of the spoon.
- Emphasise the importance of using a proper medicine spoon or medicine measure. Household teaspoons vary widely in size so it is not accurate to give doses of medicine using these.
- Show learners the medicine cup. Show them how to read the scale on the side.
- If possible, allow learners to experiment with measuring different amounts using water or sand and the spoons and medicine cups.

How would you measure 2.5 ml with this medicine spoon?

How would you measure 5 ml with a measuring cup?

Support

Learners may need support to work out the maximum number of tablets that can be taken in a day. Use beads or buttons to represent tablets so that they can physically count them. This will need to include 'half' tablets.

ESOL

Check learners understand words such as 'tablets', 'sachet', 'spray', 'lozenges' (types of medicines), 'apply', 'take', 'suck on' (actions) and '5 ml spoonful' (doses). Ask learners to add other words they know to the categories.

TIP

Point out the measurements indicated on the spoon/cup. Discuss half or partial measures (e.g. 10 ml/5 ml, 5 ml/2.5 ml). Emphasise the importance of accuracy.

ACTIVITY 4

Work out timing by counting on

- Discuss how learners note down times. Include the use of am and pm and other indications of morning, afternoon, evening or night.
- On the board/flipchart, write the instruction 'one sachet every 4 hours up to 4 times a day'. Ask learners to work out the maximum number of sachets allowed (point out how they get this information).
- Working with the same example on the board, start by giving the scenario of taking the first sachet at 9 o'clock in the morning. Count on 4 hours with learners to decide at what time the next sachet should be taken and so on until the four doses have been taken.
- Resource 5 provides further practice in working out the times of doses.

How do you work out when to take your medicine?

Support

- Make sure learners understand exactly what they are being asked to do. Where necessary, explain that each step involves adding on 4 hours.
- Learners may need support to count on whole and half hours. Use a real or play clock or watch to demonstrate.
- Encourage learners to write the times in the way they understand best – using am and pm, 11 o'clock, 11:00, etc.
- Learners could use a number line to help them.

ESOL

- As preparation, check that learners know ways of recording and verbalising times.
- Although learners may have no difficulty with the calculations, they may not have the language necessary to explain their calculations and may need additional support.

ACTIVITY 5

Work out or approximate timing for unspecified intervals

- Write on the board/flipchart the instruction 'One to be taken three times a day. Do not take more than three doses in 24 hours.' Discuss the meaning of 24 hours and how you might spread the three doses evenly over the waking hours (e.g. morning, noon and bedtime).
- Now write on the board/flipchart the instruction 'take four times a day' and ask learners how they might spread this evenly over the waking hours. Confident learners may be able to work this out exactly given a specified period of time. Less confident learners can make more of an approximation, such as morning, lunchtime, teatime and bedtime.
- Write on the board/flipchart the instruction 'one to two tablets every four hours up to four times a day'. Point out that even if you only take one tablet each time, you still have to wait four hours before you can take another one.
- Discuss typical phrases relating to dosage, such as 'complete the course', 'take at regular intervals', 'do not exceed the stated dose', 'as needed'.
- Ask learners to find examples on the empty containers and packets. Discuss these in detail.

How can you take your medicine evenly throughout the day?

What do you think 'as needed' on a medicine label means?

Support

Support learners to make approximations of timing based on the period of their own 'typical' day.

ESOL

- Discuss words for mealtimes and variations in the timing and the names for meals (e.g. breakfast, lunch, teatime and dinner).
- Review prepositions such as 'at', 'before', 'after' (e.g. 'at teatime', 'before you go to bed', 'take it after you've eaten').

Learners not currently taking any medicine

- Read through the instructions and questions on Resource 6 with learners. Model answers using the information on the medicine packet on Resource 2.
- Ask learners to look for the information on a real medicine label or packet. This might be a medicine at home or one of the empty packets used during the session.
- Learners can choose whether they write on Resource 6 or note the information elsewhere. They should answer as many questions as they can, even if this is to say that there is no information.

Learners currently taking regular medicine

- Support learners to develop useful strategies to help them plan when to take their own medicine (e.g. timers, putting medicine somewhere obvious (but out of reach of children) to remind them, use of tablet organisers or charts, and so on).
- Note that some prescription drugs are supplied as calendar packs. Discuss with learners whether these present any difficulties for them (e.g. keeping track of which month they are in and matching with appropriate pack to be used). If there are any problems, work out a strategy to help (e.g. colour coding each pack with colour used for each calendar month).

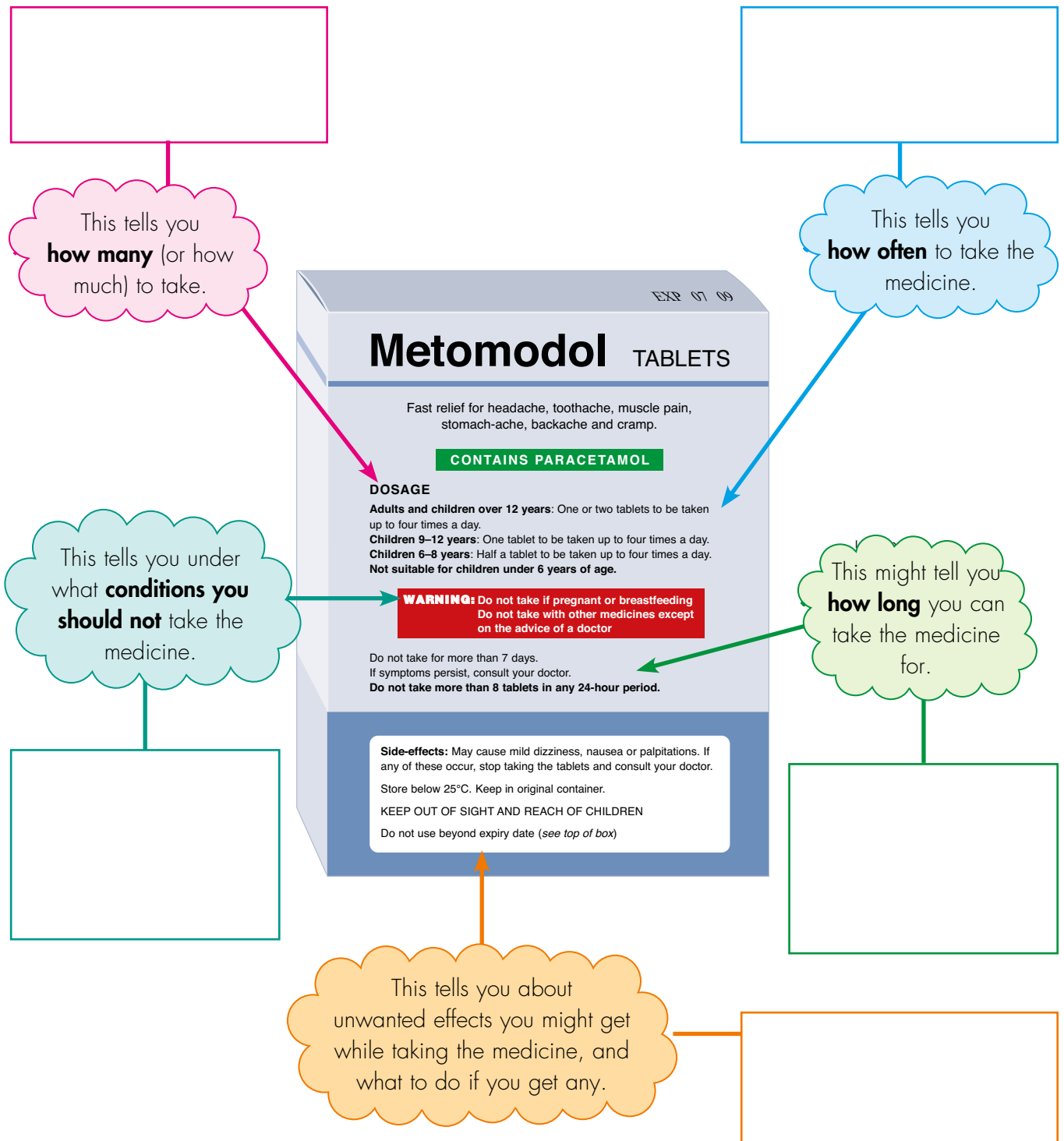
When do you need to take your own medicine? How do you remember when to take it?

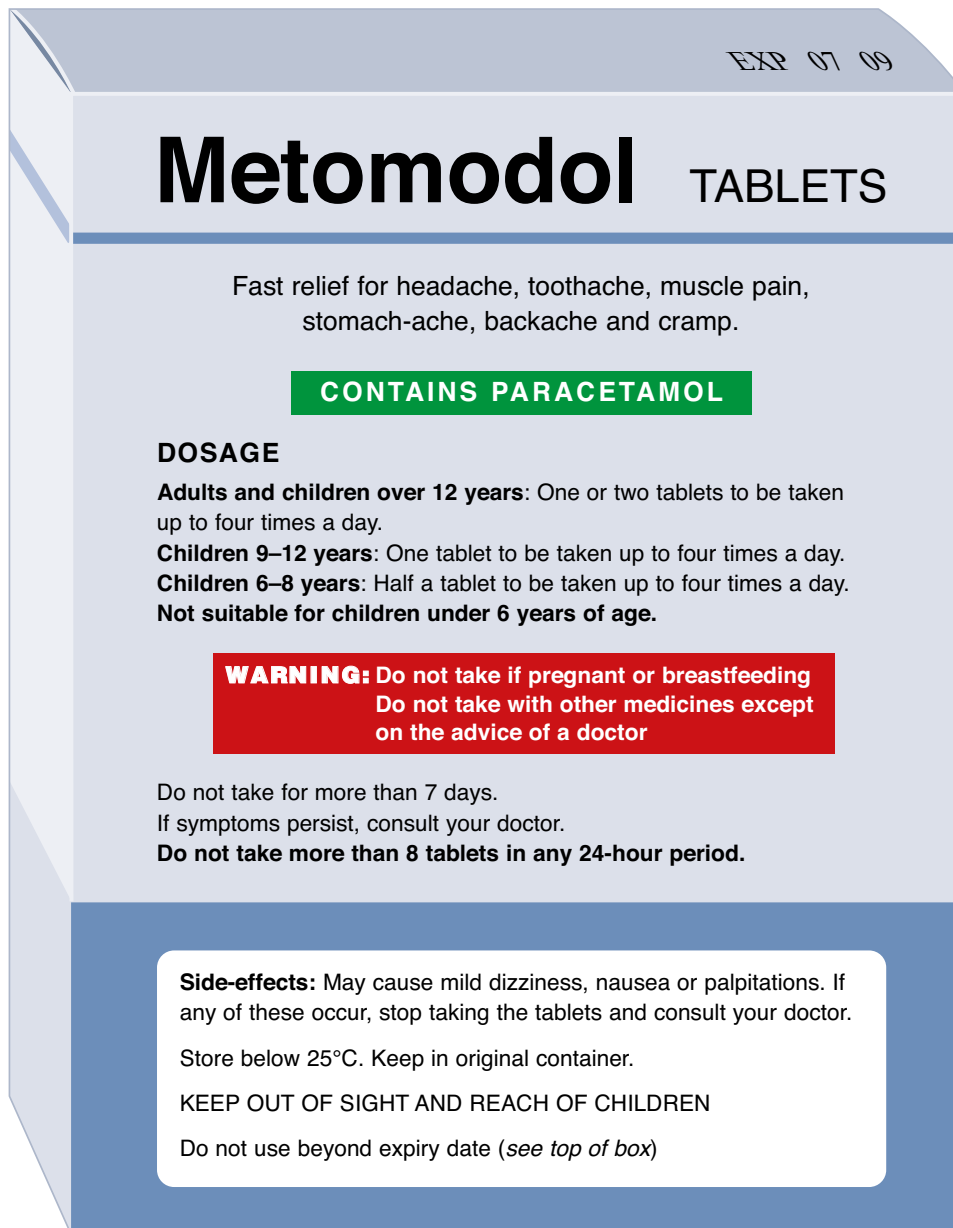
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RESOURCE 1

For a medicine to work, it is important that you take it according to the instructions. You also need to be aware of possible side-effects.

Medicine packets and labels provide information about how to take the medicine correctly and safely.





Dosage and timing

RESOURCE 3

Person cards

P

5-year-old child

P

adult taking other medicines

P

teenager

P

6-year-old child

P

pregnant woman

P

12-year-old child

P

man not taking any other medicines

Dosage cards

D

one tablet four times a day

D

half a tablet four times a day

D

one tablet four times a day

D

no tablets

D

one tablet four times a day

D

no tablets, except on the advice of a doctor

D

two tablets four times a day

D

no tablets

D

two tablets four times a day

Dosage and timing

RESOURCE 4

1 *Take one or two tablets twice a day.*

What is the maximum number of tablets you can take in one day?

2 Apply two or three times a day.

What is the maximum number of times you can use this cream in one day?

3 One or two sprays directly into the mouth up to six times a day.

What is the maximum number of sprays you can have in one day?

4 One or two 5 ml spoonfuls to be taken four times a day.

What is the maximum number of 5 ml spoonfuls you can have in one day?

5 Suck one lozenge slowly in the mouth. Repeat up to six times a day.

What is the maximum number of lozenges you can have in one day?

6 **Children 6–8 years:**
Half to one tablet up to four times a day.

What is the maximum number of tablets a 7-year-old child can have in one day?

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RESOURCE 5



This medicine must be taken regularly:
every 4 hours 4 times a day.

The time each person took the first tablet in the morning has been filled in.

Write down the times the person can take the other doses.

Sandra dose 1 8:00 am

dose 2 _____

dose 3 _____

dose 4 _____



Raffi dose 1 10:00 am

dose 2 _____

dose 3 _____

dose 4 _____



Tori dose 1 7:30 am

dose 2 _____

dose 3 _____

dose 4 _____



Wes dose 1 11:30 am

dose 2 _____

dose 3 _____

dose 4 _____



Dosage

What is the maximum number of doses an adult can take in one day?

How many tablets (or spoonfuls of medicine) can an 11-year-old child have in one day?

How often should you take the medicine?

When would you take this medicine? Write down the approximate times of day.

How long can you take the medicine for?

What should you do if you don't get better?

There are no audio scripts for this topic.

ACTIVITY 1 / Resource 1

- **How many/how much** to take: one or two tablets
- **How often** to take the medicine: up to 4 times a day
- **Conditions under which you should not** take the medicine: if breastfeeding or pregnant or if taking other medicines without first asking your doctor
- What to do if you get any **unwanted effects**: if you experience the side-effects listed (dizziness, nausea, palpitations) stop taking the medicine
- **How long** to take it: no more than 7 days consecutively

ACTIVITY 2 / Resource 3

5-year-old child – no tablets

adult taking other medicines – no tablets, except on the advice of a doctor

teenager – one tablet four times a day OR two tablets four times a day

6-year-old child – half a tablet four times a day

pregnant woman – no tablets

12-year-old child – one tablet four times a day

man not taking any other medicines – one tablet four times a day OR two tablets four times a day

ACTIVITY 3 / Resource 4

- 1 maximum number of tablets = 4 (2×2)
- 2 maximum number of times = 3
- 3 maximum number of sprays = 12 (2×6)
- 4 maximum spoonfuls = 8 (2×4)
- 5 maximum number of lozenges = 6 (1×6)
- 6 maximum number of tablets = 4 (1×4)

ACTIVITY 4 / Resource 5

Sandra

dose 1 8:00 am
dose 2 midday (12:00 pm)
dose 3 4:00 pm
dose 4 8:00 pm

Raffi

dose 1 10:00 am
dose 2 2:00 pm
dose 3 6:00 pm
dose 4 10:00 pm

Tori

dose 1 7:30 am
dose 2 11:30 am
dose 3 3:30 pm
dose 4 7:30 pm

Wes

dose 1 11:30 am
dose 2 3:30 pm
dose 3 7:30 pm
dose 4 11:30 pm