

Episode 11 Activity 6<sup>th</sup> May 2014

# **Asthma**

# **Key Learning**

Students will develop a greater understanding of what asthma is, what causes asthma and changes to the respiratory system during an asthma attack.

# The Australian Curriculum

Science / Science as a Human Endeavour / Use and influence of science

Scientific understandings, discoveries and inventions are used to solve problems that directly affect people's live

(ACSHE083) Year5 (ACSHE100) Year 6







Scientific knowledge is used to inform personal and community decisions (ACSHE217) Year 5 (ACSHE220) Year 6







Health and Physical Education/Personal, social and community health/Being healthy, safe and active

Plan and practise strategies to promote health, safety and wellbeing Year 5 and 6



# **Discussion Questions**

- 1. How old is Jack?
- 2. How long has Jack had asthma?
- 3. When did Jack start to notice the symptoms of his asthma?
- 4. Which body organ is mostly affected by asthma?
- 5. In your own words, describe what happens to Jack when he's having an asthma attack.
- 6. About how many people in the world have asthma?
- 7. Where is it most common? Why do you think that is?
- 8. What are some of the ways Jack keeps on top of his asthma?
- 9. Describe in your own words how a 'puffer' works.
- 10. Why do you think it's important to have a day dedicated to 'Asthma'?

## **Activities**

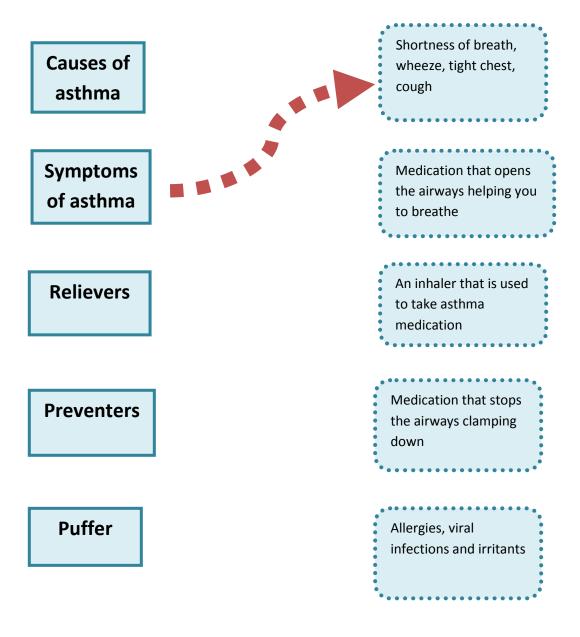
#### Class Discussion

After watching the BtN Asthma story, hold a class discussion about Jack's story and how he manages his asthma. Clarify students' understanding of:

- What asthma is
- What causes asthma
- What the symptoms are
- How it can be treated



Can you match the following words to their correct meanings?



#### K-W-H-L

Working in pairs, ask students to discuss and record what they already know about asthma. What questions were raised in the discussion (what are the gaps in their knowledge)? The K-W-H-L organiser provides students with a framework to explore their prior knowledge on this topic and consider what they would like to know and learn.



K – what do you know?

**W** – what do you want to know?

 $oldsymbol{\mathsf{H}}$  – how will you find out?

L – what did you learn?

Students can research their own questions or some of the following:

- What causes asthma what are the triggers?
- What are the symptoms of asthma?
- How do doctors test for asthma?
- What is the best way to prevent and treat an asthma attack?
- How does the respiratory system change when someone has an asthma attack?
- Why is asthma considered a serious health problem in Australia?
- How do schools support kids with asthma?

There are weblinks at the end of this resource to support students with their research. Creating an online mindmap using instaGrok <a href="http://www.instagrok.com/">http://www.instagrok.com/</a> may also be helpful.

Some ways students can present their research:

- Information report
- Infographic
- Prezi presentation http://prezi.com/index/
- Oral presentation
- Glogster http://www.glogster.com/
- Brochure the *Read Write Think* website has templates students can use to publish their work http://www.readwritethink.org/files/resources/interactives/Printing\_Press/

#### How does it feel to have asthma?

Students will conduct an experiment that gives them an idea of how it feels to breathe through a restricted airway. Ask students to make some predictions about what they think will happen.

## The Straw Experiment

- 1. Place two straws in mouth side by side, pinch nose and breathe through the straws for ten seconds.
- 2. Remove one straw, keep nose pinched and breathe through remaining straw for ten seconds.
- 3. Join the two straws together, pinch nose and breathe through straw for ten seconds.
- 4. Discuss with students how difficult it was to breathe with each method and ask them to describe in their own words what they think happens in the lungs when someone has an asthma attack.

# Related Research Links

Behind the News – Asthma http://www.abc.net.au/btn/story/s3201455.htm

National Asthma Council of Australia - Kids with Asthma



## http://www.kidswithasthma.com.au/

Asthma Foundation – Asthma in school-aged children <a href="http://www.asthmafoundation.org.au/asthma\_in\_school\_aged\_children.aspx">http://www.asthmafoundation.org.au/asthma\_in\_school\_aged\_children.aspx</a>

Child and Youth Health - Asthma

 $\underline{http://www.cyh.com/healthtopics/healthtopicdetails.aspx?p=243\&np=292\&id=2215}$ 

Asthma Australia – Information for Schools <a href="http://www.asthmaaustralia.org.au/For-schools.aspx">http://www.asthmaaustralia.org.au/For-schools.aspx</a>

Asthma Australia – Asthma Triggers pdf

http://www.asthma.org.au/Portals/0/doc/Brochures/Asthma%20Australia/Triggers-Brochure-1.pdf

