



**Lesson Plan:** Greater than, or less than?

**Level:** Stage 2

**Syllabus link:** MA2-4NA “applies place value to order, read and represent numbers of up to five digits” and MA2-1WM “uses appropriate terminology to describe, and symbols to represent, mathematical ideas”

### LESSON OUTLINE

Students will compare weather and air quality measurements from different locations to decide whether one measurement is greater than or less than the other. They will practice using the mathematical symbols ' $<$ ', ' $>$ ' or ' $=$ ' to express their answers.

### Resources/Materials:

- Worksheet (included)
- Device with access to SWAQ website



### Description of activity:

Before doing this lesson, students should be able to apply place value to order numbers. They will use this knowledge to write number sentences using the mathematical symbols for greater than and less than.

Begin the lesson by introducing students to the mathematical symbols for greater than ( $>$ ) and less than ( $<$ ). To help them remember, you can use the analogy of the hungry crocodile. The two lines that make up the symbols represent the jaws of the crocodile. The crocodile is hungry, so it always wants to eat the bigger number. By comparing the two numbers and deciding which one is bigger, you can then draw the symbol so that it looks like the crocodile is eating the larger of the two numbers (Check out our additional resources for some fun videos explaining the hungry crocodile).

To practice these skills, students should complete the worksheet. Make sure that they are familiar with how to access the data on the SWAQ website. If they are not, you should give them a quick demonstration. Go to [www.swaq.org.au](http://www.swaq.org.au) and click on 'explore the data'. You can search for a specific school using the search bar above the map, or you can scroll down to see the list of schools and click on the name of the school from there. Once you have clicked on the school, you can see a summary of all the measurements including individual measurements for each of the air pollutants (rather than the overall air quality index).

### Additional Resources:

- Number Gators – A song to help kids remember the greater than and less than symbols using the hungry crocodile (alligator) method.  
<https://www.youtube.com/watch?v=M6Efu2slal>
- A rap song to help kids remember the greater than and less than symbols using a range of methods.  
<https://www.youtube.com/watch?v=ka9zbPcqXBI>

### Key Questions to Ask

What is the symbol for less than?

What is the symbol for greater than?

How can you remember the difference between the two symbols?

How is place value used to order numbers?

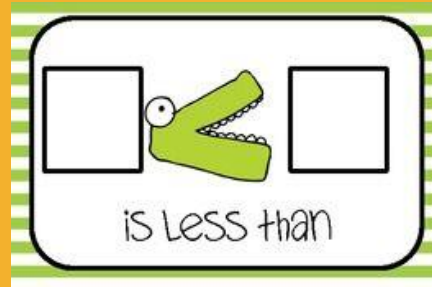
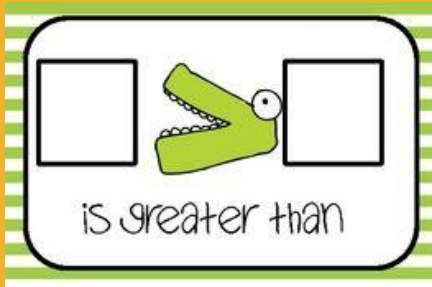
If the two numbers are the same, what symbol should you use?

# Greater Than or Less Than?



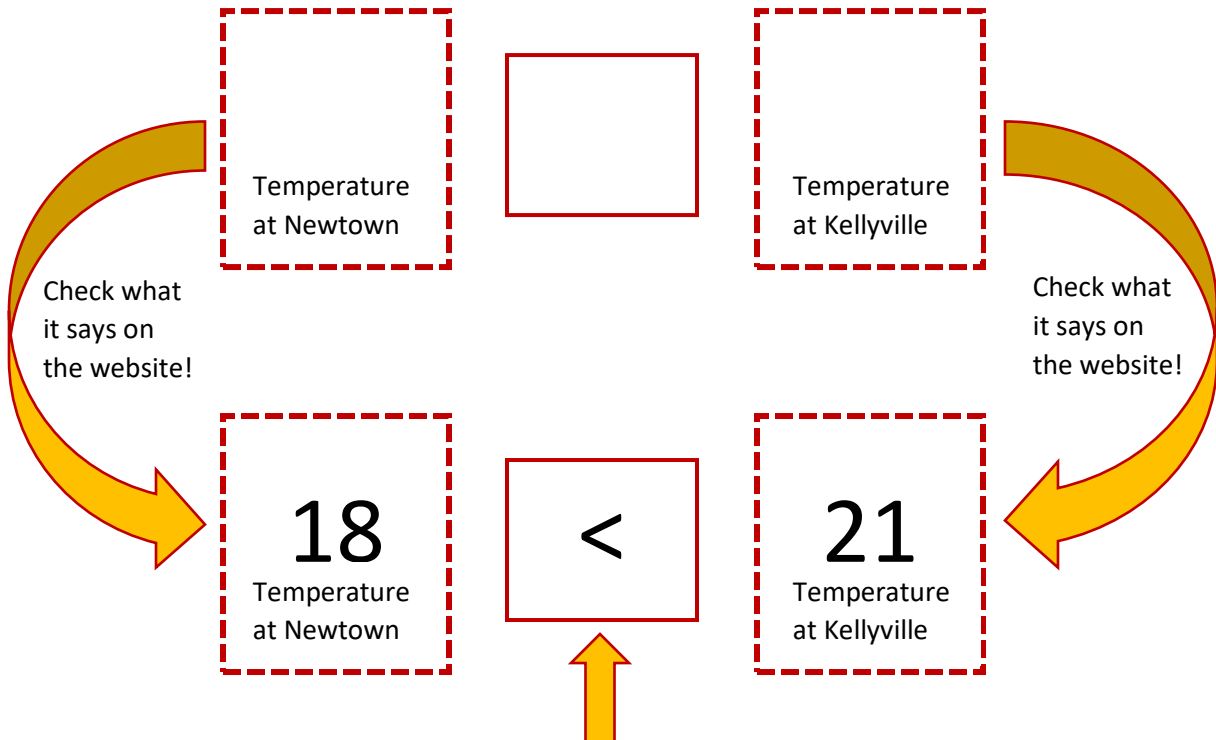
## SYMBOLS

Remember – the hungry crocodile always eats the bigger number!



## EXAMPLE

Use the data from the SWAQ website to fill in the gaps.



After you have filled in the numbers, you decide which symbol to use (<, > or =)

Go online to [www.swaq.org.au](http://www.swaq.org.au) to find the missing measurements. Then decide which symbol (<, > or =) you need to use to complete the number sentence.

1.

Temperature at  
Narellan

Temperature at  
Taren Point

2.

O<sub>3</sub> at Brookvale

O<sub>3</sub> at UNSW

3.

NO<sub>2</sub> at Glenorie

NO<sub>2</sub> at Chullora

4.

PM<sub>2.5</sub> at  
Leppington

PM<sub>2.5</sub> at  
Luddenham

5.

PM<sub>10</sub> at UNSW

PM<sub>10</sub> at Kurnell

6. Humidity at  
Kellyville  Humidity at  
Dulwich Hill

7. O<sub>3</sub> at Luddenham  O<sub>3</sub> at Glenorie

8. NO<sub>2</sub> at Kurnell  NO<sub>2</sub> at Leppington

9. PM<sub>2.5</sub> at Chullora  PM<sub>2.5</sub> at UNSW

10. PM<sub>10</sub> at Brookvale  PM<sub>10</sub> at Glenorie

Extension: If you have finished, try writing the number sentences as full sentences using words. For example, the number sentence in the example on the first page would be written as "The temperature at Newtown is less than the temperature at Kellyville".