

# Lesson Plan – 7 Times Table



## Introduction

The 7 times table is taught by Kylie the Kangaroo. Kylie is also the overall host for the App so the students are already familiar with her love of number sense and practice, to grow connections in your brain. Kylie helps explain to the students in her own unique way that “you have already learnt the answers to most of the 7 times tables when you learnt the other times tables, if you just swap the numbers around”. This is an important concept in 7 times tables as it often one of the hardest tables for students to learn. Kylie then goes to explain that “a great example of number sense is knowing that the number 7 is just 5 plus 2. If you know your 5 times and 2 times table, then you also know your 7 times table. It’s the same as adding your 5 times and 2 times table together”.

Kylie goes on to provide a refresher that 5 times and 2 times can both be worked out using skip counting. Some students will just want to double for 2 times and some may also already be efficient at recalling the 5 times table. If this is the case they will be very efficient at solving 7 times problems.

The answers to most of the 7 times questions can be worked out by swapping the numbers around and using the previously learned tables. The students, with your guidance, may want to solve the 1 times, 2 times, 3 Times, 4 Times, 5 times, 6 Times, 9 Times and 10 times question this way.

## Learning Outcomes

- Each student grasps the concept that number sense can be used to work out the 7 times table
- Each student understands that 7 times can be solved by 5 times plus 2 times and is competent in these calculations
- Each student understands that if you swap the 7 around in the multiplication you get the same product, or answer and that it’s more efficient to solve some of 7 times questions this way (commutative property).
- Each student continues to develop their mindset through the feedback provided for correct and incorrect answers.

# Lesson Plan – 7 Times Table



## Resources Required

- The App on a device with 3GB of available memory to download all of the videos
- Overhead projector or TV Monitor connected to the device (if teaching in a Group)
- Paper and pens/pencils for students

## Scenes

- This activity involves watching the “Learn” scene, followed by the “Tips” scene and then successfully answering all twelve 7 Times Table questions. After login, select the “Learn the Times Tables” button followed by the “Start” button or “7 Times” tile on the Home Screen. Before commencing the lesson make sure that you have completed this step as it will start the process of downloading the 7 times videos which will take a few minutes.

## Lesson

Time	Task
45 mins	<p><b><u>Key Concepts for 7 Times</u></b></p> <p>(1) Start the lesson by watching the “Counting in Pairs” song again. Select the “2x Song” button at the middle bottom of the Home screen, watch and sing along to the video(2 mins). Ask the students to recall the “key concepts in the 2 times tables”:</p> <p>These should include:</p> <ul style="list-style-type: none"><li>- When you multiply by 2 you are doubling that number</li><li>- You can work out the solution to 2 times by skip counting in 2’s or pairs</li><li>- Using your hands and feet is a useful way to skip count in 2’s.</li><li>- You can solve up to 10 times with your hands and then 11 and 12 times with your feet</li></ul> <p>Dependent on the students understanding, you may choose to spend a few minutes to practice doubling or skip counting in 2’s on hands and feet.</p>

# Lesson Plan – 7 Times Table



(2) Follow this up by watching the “5 Times Rap” song again. Select the “5x Song” button at the middle bottom of the Home screen, watch and sing along to the video (2 mins).

Ask the students to recall the “key concepts in the 5 times tables”:

These should include:

- The best way to learn the 5 times table is to skip count in 5’s
- There is a pattern in the 5 times table. When you multiply odd numbers by 5 the answer ends in a 5 and when you multiply even numbers the answer ends in a zero.
- Using your hands and feet is a useful way to skip count in 5’s.
- You can solve up to 10 times with your hands and then 11 and 12 times with your feet
- 5 is half of 10. One hand makes 5 and 2 hands make 10.

Dependent on the students understanding, you may choose to spend a few minutes to practice skip counting in 5’s on hands and feet.

(3) Select the “7 Times” tile on the home screen. Select the “Learn” button and watch the video (4 minutes).

At the conclusion of the video, ask the student/s:

**“What were Kylie the Kangaroo’s key messages within the Learn video?”**

Responses should include but not be limited to:

- They have already learnt most of the 7 times tables when they learnt the other Times Tables.
- With 7 times problems it is often more efficient to swap the numbers around and solve by using the tables already learnt (commutative property).
- 7 times problems can also be solved using number sense. You just split 7 times into 5 times and 2 times and add these together to get the answer.

# Lesson Plan – 7 Times Table



20 mins	<p><b><u>Tips to help with 7 Times</u></b></p> <p>Select the “Tips” Button and watch the video on the Practice screen (1.5 minutes). You can expand the video to full screen by pushing the expand button on the top right-hand corner of where the video is playing. It will automatically drop back to the practice screen at the end.</p> <p>At the conclusion of the video the first question will play. Wait for it to finish and ask the student/s:</p> <p><b>“What were Kylie the Kangaroo’s key messages within the Tips video?”</b></p> <p>Responses should include but not be limited to:</p> <ul style="list-style-type: none"><li>- You will grow more connections in your brain through practice</li><li>- Maths is about finding patterns and connections and using these to find creative ways to work out solutions.</li><li>- Some of the 7 times questions are easier to solve using one the tables previously learned (It is worth exploring this further with the students. They may decide to solve the 1 times, 2 times, 3 Times, 4 Times, 5 times, 6 Times, 9 Times and 10 times question this way as it more efficient)</li></ul>
70 mins	<p><b><u>Solving the 7 Times Tables</u></b></p> <p>The objective is to work through the 12 seven times questions until all 12 stickers are obtained for the correct answers. You also want to enter some mistakes, firstly so the students can all learn from the mistakes and, secondly so you can listen to Kylie and her “Growth Mindset” advice when you do make a mistake.</p> <p>This activity can be done as individuals or in groups of up to 4 students.</p> <p>“For each real-life example, you will need to look at the question and firstly work out the times tables problem that you need to solve and write this in the working out space. The numbers are in bold to make it easier. Remember the way to write it is the number of groups multiplied by the objects. I</p>

## Lesson Plan – 7 Times Table



then need you to solve that problem. We will then type it in and check if it is the correct answer.”

Help the students with the first question which will be  $x$  times 7. Show the working in the working out space by writing the equation and then highlighting there is  $x$  groups each with seven objects resulting in the equation  $x$  times 7. Then ask,

- “If there are  $x$  times 7 objects, then what is going to be the best strategy to solve this. Is it using number sense or is it swapping the numbers around and solving with the easier times tables?
- Use the working out space to work out the solution.
- Type the answer and select the “Check” button
- Watch the correct answer video from Kylie and discuss any interesting points.
- Select the “I’ve Got This” button to receive your sticker
- Select the “Next” button and the next question will automatically appear on the practice screen
- Ask each student or groups to solve this one using number sense or by swapping the numbers around and using one of the previous times tables they have learnt. Give them a few minutes to report back.
- Ask first if there are any ways you could make a mistake with this question as learning from mistakes is when our brain grows the most. If there is, then show how you could make the mistake, type in the wrong answer and watch the video response from Kylie. There are some excellent mindset sayings and examples in each of the incorrect answer videos that are well worth sharing with the students.
- Select the “Watch Again” button and watch the video to show the coaching available if the student answers incorrectly.
- Ask for someone to come up and show the correct workings to solve the problem. Explore the concept of  $x$  groups of 7 object, with them. Ask if it is more efficient to solve this one by swapping the numbers

# Lesson Plan – 7 Times Table



	<p>around and using another table or by using number sense. You may want to show the workings for both.</p> <ul style="list-style-type: none"> <li>- Ask them to type in the correct answer and select "Check"</li> <li>- Select the "I've Got This" button to receive your sticker</li> <li>- Select the "Next" button to move onto the next question</li> <li>- Repeat the above sequence until all 12 questions are answered correctly</li> <li>- Select the "Flashing Kylie Sticker" in the middle of the sticker wheel</li> <li>- The Congratulations video will play, and the Kylie Sticker will pop into place on the Home Screen as recognition that you have learnt and understand the 7 Times table.</li> </ul> <p>Give your student/class some applause or other form of recognition.</p> <p>Wrap this activity up by asking the student/group:</p> <ul style="list-style-type: none"> <li>- Do you now feel like can solve 7 times table questions using number sense and by swapping the numbers around or do you need some more practice?</li> </ul> <p>If they feel like they need more practice, then click on the 7 times tile again which will take you to the Progress Screen where you can select the "Reset" button. It will ask if you want to reset. Select "Yes" and then select the "Next" button to start the first question again.</p> <p>Once the student/class are comfortable that they understand and can solve the 7 times table, then announce "you are now ready to move onto the 8 Times Table".</p>
15 mins	<p><b><u>Creative Activity – "Voice Acting"</u></b></p> <p>This activity can be done as individuals, in groups of up to 4 or as a class.</p>

# Lesson Plan – 7 Times Table



	<p>“Kylie the Kangaroo is the overall star of the App. She guides you through the App from start to finish. This is your opportunity to be the star of the App! I’d like you to all practice and, if you’re willing, share your best version of Kylie the Kangaroo’s voice. The phrase that I want you to practice is; “Woohooooo! The seven times tables are one of the most difficult to learn and you’ve stuck with it until you could solve them all”. Be sure to have the same level of enthusiasm and excitement in your voice as Kylie does in hers.</p> <p>At the end of a few minutes practice ask if there are any volunteers to share their version of Kylie the Kangaroo’s voice. Applaud them for their efforts after each student is finished.</p>
	<p><b><u>Follow-Up Activity – 7 Times Worksheet</u></b></p> <p>The App is designed with the real-life questions as a means of formative assessment to give an indication how each student is learning the material throughout the course. Once the students have demonstrated an understanding of the 7 times tables, there is a worksheet available with 12 different questions to either continue practicing or to use as a means of summative assessment. The worksheets include a space for the students to work out the answers. All worksheets are available for download from the following link:</p> <p><a href="https://educationthroughanimation.com/pages/worksheets">https://educationthroughanimation.com/pages/worksheets</a></p>