

M27



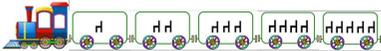
15-20 minutes



- ❖ Animal Families – Set 2 from M26



- ❖ Number Train from M26



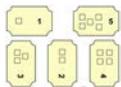
- ❖ Ticket Office sign from M26



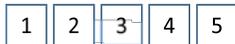
- ❖ 5 Tickets (with numerals)



- ❖ 5 additional tickets (optional)



- ❖ 5 Numeral Cards



- ❖ A whistle (optional)
- ❖ A hat to dress up as the Ticket Officer (optional)
- ❖ Blu Tack or similar

NUMERALS FOR THE SPECIAL NUMBER TRAIN



To enable children to make the connection between a number (the quantity) and its name
 To enable children to make the connection between a number (the quantity), its name and the written symbol conventionally used to represent it (its numeral)

To use visual representation to associate the names of the numbers and their numerals with the quantities that they represent



Note: The main aim of this session and the next one is to help children grasp a crucial idea: that the number of the seats in the carriage and the name of the carriage do not change; consequently we can use the name of the carriage to designate both the number of seats, and the number of passengers. The game of buying and selling tickets for different carriages on the Number Train fosters the child's ability to say, 'Two seats, two passengers' as a numerate adult would, and to help the child grasp the fact that the objects may differ, but the quantity, its name and its conventional symbol (the numerals) are identical. The carriages, with their numerals prominently displayed, help children to associate the number of seats in a carriage with that numeral. The rule – as many passengers as there are seats – helps to associate a specific number of passengers with a specific carriage. Thus the carriages act as visual mediators, fostering the ability to think of quantity as an abstract concept – how a number here applies equally to the carriage, its seats and its passengers.

The Special Number Train:

Display the Special Number Train from the last session, and remind your child of what they did with it before. Then say: *Do you remember this about the number of seats? The nearer the carriage is to the engine, the fewer seats it has. The farther it is from the engine, the greater the number of seats it has.*

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Your child can connect the numerals 1, 2, 3, 4 and 5 with a carriage containing that number of seats.

Your child can point to a carriage when its name is given, and vice versa.
 Your child can guide the 'passengers' to the correct carriages of the Number Train.
 Your child recognises and corrects 'mistakes' made by the Ticket Officer.
 Your child can work with you cooperatively.

NUMERALS FOR THE SPECIAL NUMBER TRAIN – continued



Remind them that each carriage has its own special name – One, Two, Three, Four and Five. Say: *To help us remember the names of the carriages better, we can write them down using symbols: 1, 2, 3, 4, 5.* If your child is not familiar with these numerals yet, at this point you may wish to demonstrate how to write these on a whiteboard or some blank paper and discuss their use as ‘symbols’ to represent those numbers further.

Show your child the Numeral Cards 1 to 5, and ask them to place the cards one-by-one on the appropriate carriages and stick them down with a small piece of Blu Tack. As they do this say: *This is Carriage One, and this is Carriage Two,* and so on.

Point to the Carriage:

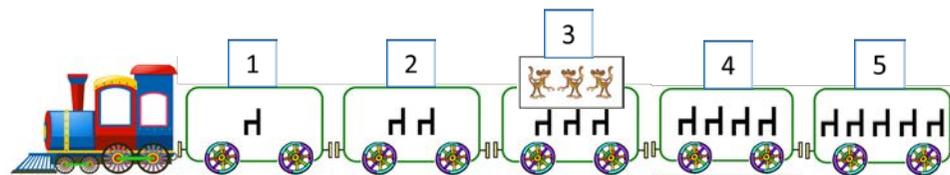
Play this game to help your child remember the names of the carriages, and to reinforce the association between the name and the numeral. Say the name of a carriage and have your child point to it. Go in order and cover all the carriages, i.e. *Show me Carriage One... Carriage Two... Carriage Three...* and so on. Then make the game a bit more difficult by asking out of order, for example: *Show me Carriage Three... Carriage Five... Carriage One... Carriage Four... Carriage Two...*

All Aboard:

Review what makes the train special: *Can you remember the secret of the Special Number Train? What makes it special? There's a secret rule about boarding the train. You can only board the train if you know the rule. What is the rule?* (Every carriage has to have as many passengers as there are seats – no more and no less. The number of passengers and the number of seats must be exactly the same – a seat for every passenger and every passenger in a seat. If there are more passengers than seats, you can't get on and if there are more seats than passengers, you can't get on.)

Ask your child to help the animal families from Set 2 to board the train as before, as they want to go to the fair in another town. To give more opportunities for your child to practise the appropriate mathematical language, say: *This time let's help the animals in a way that they learn the rule for themselves too. That way they can do it on their own next time they need to go on this train. Let's show them as they board why they are boarding that particular carriage.*

Have the Monkey Family come first, for example, and to give your child an example, say: *Come along monkeys, this is your carriage! Look it has 3 on it! There are three of you! Now, has everyone got a seat? Good – a monkey in every seat and no monkeys left over. 3 monkeys in 3 seats in Carriage Three!*



Continue in this way with the other animal families from Set 2.

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NUMERALS FOR THE SPECIAL NUMBER TRAIN – continued



Then suddenly say: *Oh no! We were so busy helping them find the right carriage that we forgot to have them get tickets! We need to get everybody off and get them into the queue at the ticket office!*

Tickets from the Ticket Office:

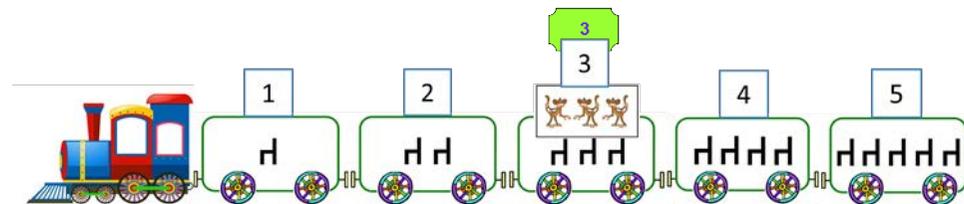
Ask your child to help the animals buy the tickets that they need for boarding the Number Train.

You are the Ticket Officer again. Set yourself up with your props, as in the last session, and put out the tickets with the numerals on it. Remind your child that you sometimes get distracted and give out the wrong ticket, so they'll need to check carefully.

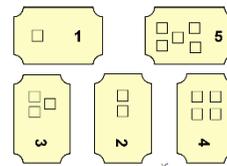
When your child comes to the Ticket Office, have them show you one animal family card at a time. Give them a ticket with a numeral on it, telling your child which carriage the ticket is for. For example: *The monkey family need a ticket for Carriage Three, because there are 3 of them. Here is your ticket with the 3 on it.* Ask your child to help them 'board' again, sticking the Animal Family card and their ticket onto the appropriate carriage.

Make some deliberate mistakes with respect to the names of the numerals – for example, give your child a ticket with the numeral 4 on it and tell them it is the ticket for Carriage Three.

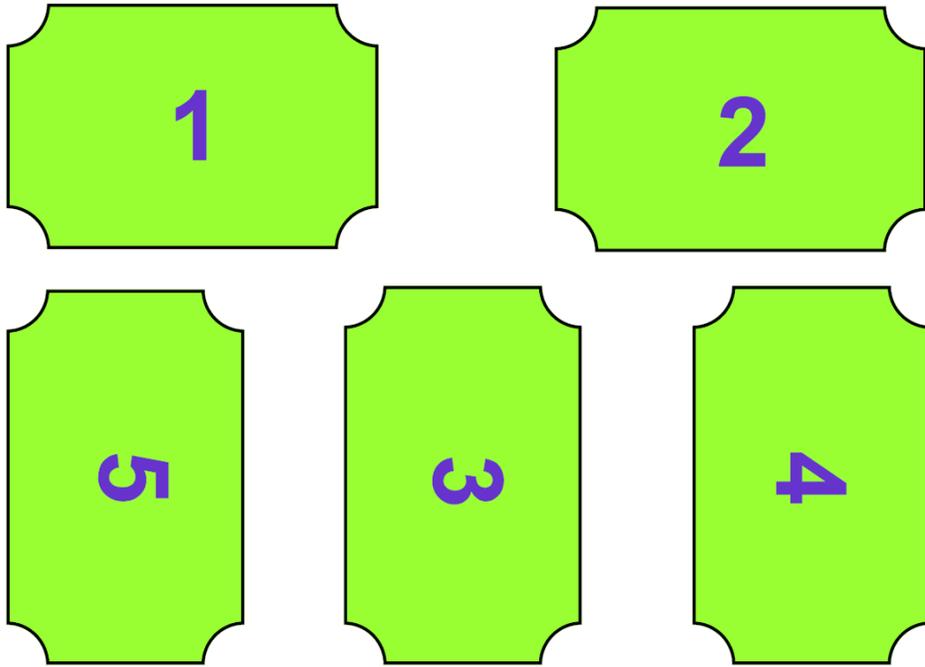
Continue until your child has bought tickets from you for all five families and they are all on board the train. When all five carriages are full, 'blow the whistle' for the train to depart and have the animals cheer that they are finally on their way to the fair.



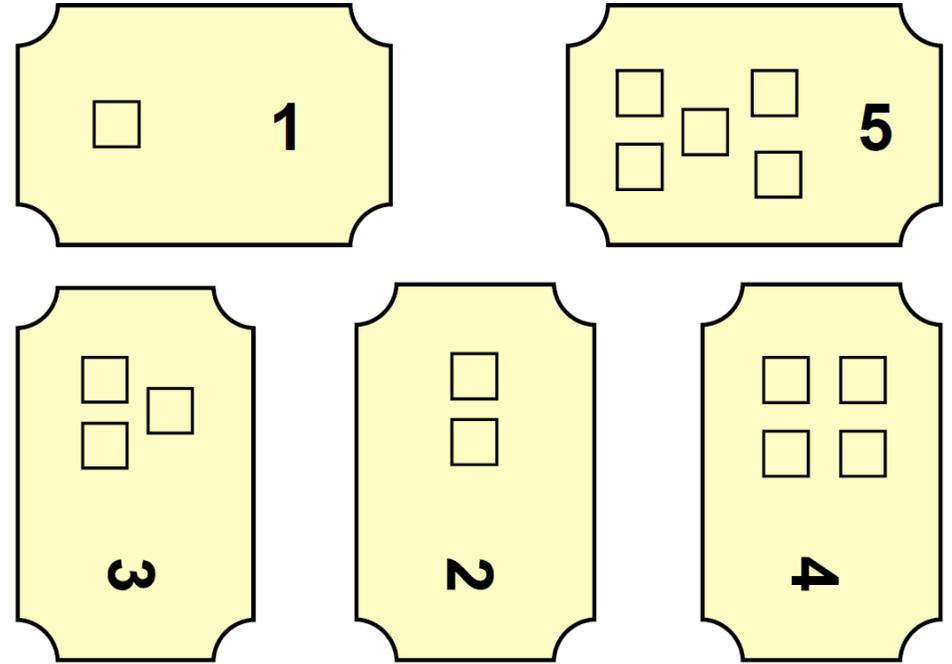
Note: If your child needs additional support with this last part of the session, you can use the additional tickets provided, so that your child has the numeral and a visual prompt, in terms of the number of squares on the ticket, to help them.



Tickets with numerals on - cut out each separately.



Additional tickets that you may need - see note at the end of the session instructions. Cut out each separately.



Numeral Cards - cut out each separately.

