

What is Numberblocks?

Numberblocks, first broadcast in January 2017, is a pre-school BBC television series aimed at introducing children to early number.

The materials are designed to be used in conjunction with the *Numberblocks* episodes. They highlight and develop the key mathematical ideas that are embedded in the programmes. Each set of materials comes in the form of a PowerPoint file, and includes the following features:

The *Practitioner Notes* consist of three elements:

1. *The episode description* summarises the story and the key things that happen
2. *The maths in the episode* explains the key mathematical concepts that are featured in the episode
3. *Using mathematical language* - because it is important that practitioners model precise and correct mathematical language, there are suggestions of key sentences that you might use and have repeated; they provide a language structure to connect each mathematical idea to different contexts. Children will initially use their own language to talk about the mathematics, and will develop correct and precise language if this is modelled by adults.

Talk and Discuss Together provides a set of slides, designed to be used with children after they have watched the episode. They provide a stimulus to talk about what children have noticed, and draw their attention to key aspects of the mathematics. There are often notes for each slide, indicated by a blue dot in the bottom right-hand corner. The notes give ideas for supporting mathematical talk and engaging children in practical activity; some slides have animation to illustrate mathematical concepts.

Enabling Environments gives suggestions for extending the mathematics into the wider Early Years environment where children engage in meaningful activity and explore mathematical concepts.

Learning Together in Year 1 extends the mathematics into Y1. The slides are designed to be used within the context of whole class teaching for mastery.

To access these PowerPoints, follow the link below or register with the NCETM and search Numberblocks.

<https://www.ncetm.org.uk/resources/52060>

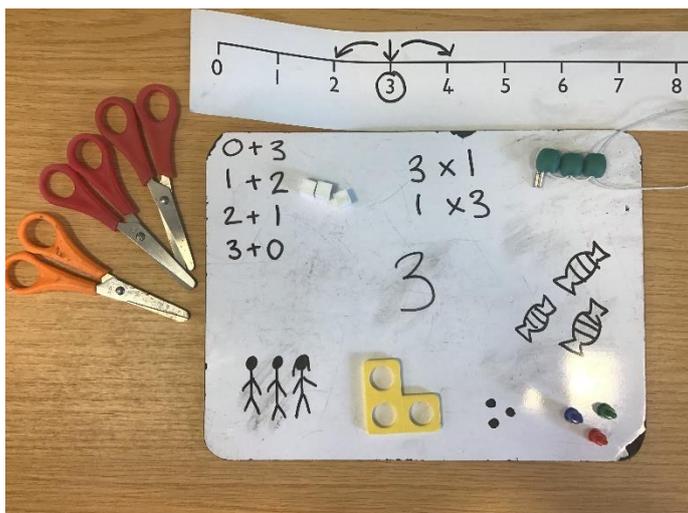
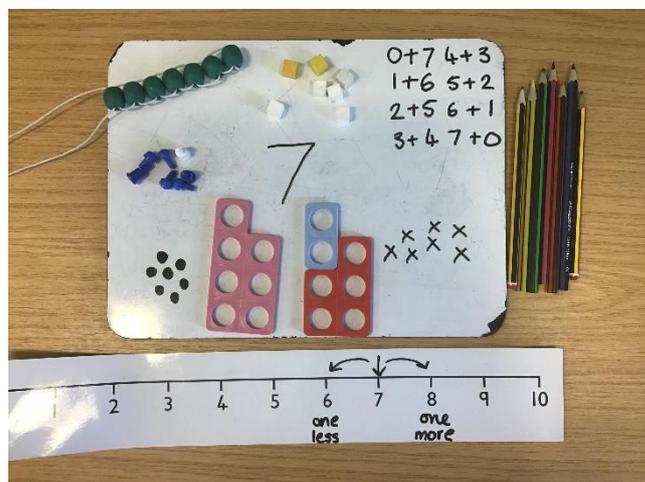
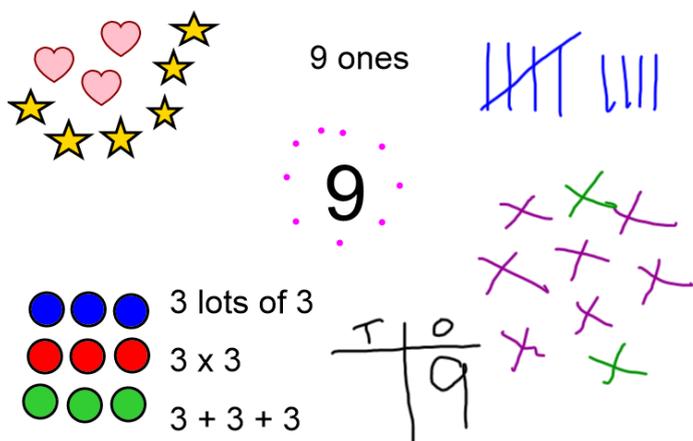
How can this be used in the class?

Numberblocks is a fantastic resource to be used in both EYFS and KS1 to support number facts and number bonds.

As a daily starter, the children will be given a number of the day. This will be displayed on the board and referred to during the day.

After watching the episode linked to the number of the day, the children are to discuss the different ways of making that number. This can be in a group discussion on the board or in circle time with equipment. The teaching notes and slides provided by NCETM can also be used in the session for ideas and resources.

Examples of what this looks like below.



Episodes can be found on the CBeebies page - Numberblocks.

<https://www.bbc.co.uk/cbeebies/shows/numberblocks>

Resources attached

1. Episode summary guide
2. 0-10 number track
3. Stick puppet characters
4. Border display
5. 0-10 Visual number lines
6. 0-10 Number fan
7. Character cut outs for displays
8. Story stone templates
9. Role play headbands



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[NCETM Numberblocks materials](#) (PowerPoints to accompany Series 1 and Series 2)

Series	Episode title	Episode summary	Mathematics
1	One	Learn all about the number one with Numberblock One.	Counting to 1
1	Another One	One bumps into a magic mirror and meets another One.	2 is more than 1
1	Two	Learn all about the number two with Numberblock Two.	Counting to 2, the 'twoness' of 2
1	Three	Learn all about the number three with Numberblock Three.	3 is more than 2
1	One, Two, Three!	Three does magic tricks with apples.	Counting to 3; comparing numbers 1, 2 and 3 – 'bigger' and 'smaller'; ordering numbers 1 to 3; 3 is made of 2 and 1
1	Four	Learn all about the number four with Numberblock Four.	4 is more than 3; counting to 4; the structure of 4 as a square number; recognition of 4 items without counting (subitising)
1	Five	Learn all about the number five with Numberblock Five.	5 is more than 4; counting to 5; line up 1 to 5 in order
1	Three Little Pigs	The Numberblocks' version of the tale the Three Little Pigs and the Big Bad Square.	Counting to 4; adding 1s
1	Off We Go	Five and friends set off on a rhyming romp through field and forest.	Counting to 5; line up 1 to 5 in order; identify missing numbers within a 1 to 5 line-up
1	How to Count	It is a lovely day for a picnic, but one of the flapjacks is missing!	The key principles of counting: one-to-one correspondence; cardinality; stable order
1	Stampolines	Three opens a stampoline park, where her friends have splatty fun making inky prints.	Subitising numbers 1 to 5; different ways of arranging blocks to 5; conservation of number
1	The Whole of Me	The Numberblocks perform a song and dance all about the parts that make a whole.	Composition of numbers 1 to 5: introduction to 'part-part-whole' Structure; partitioning a whole number into parts; conservation of number
1	The Terrible Twos	Tricky twins turn up – the Terrible Twos – who decide it's time to tickle their friends.	4 can be partitioned into 2 and 2; and, 1 and 1 and 1 and 1.
1	Holes	Five and friends discover a hole that makes their heads fall off!	The number of a group can be changed by adding to it or taking from it; addition and subtraction of 1; number bonds to 5
1	Hide and Seek	Five is so good at hide-and-seek that she can find the others without looking up from her book.	Addition and subtraction of numbers to 5; number bonds to 5



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2	Six	The Numberblocks make a new friend who likes to roll dice.	Counting (1 to 6); subitising (dice patterns)
2	Seven	It's a rainy day for a picnic, but lucky number Seven makes everything come up rainbows.	7 is more than 6; counting (1 to 7)
2	Eight	Numberland is rocked by the arrival of superblock Eight, also known as Octoblock.	Counting (1 to 8); 8 is one more than 7; subitising (8)
2	Nine	Numberblock Nine arrives in Numberland and sings a song about squares.	Counting (1 to 9); the structure of square numbers (4 and 9); partitioning and combining 9
2	Ten	Ten turns up to tell the Numberblocks what it's like to be a perfect ten.	Counting (1 to 10); 10 ones are equivalent to one 10
2	Just Add One	One's idea of fun is singing, dancing and making friends by adding One.	Adding 1; counting (1 to 10)
2	Blast Off	Find out which pairs of numbers add together to make ten with the Numberblocks.	Count back from 10 to 1; number bonds that total 10
2	Counting Sheep	Six tries to get the sheep to sleep and finds two (or three) heads are better than one.	Exploring equivalent ways to represent 6; partitioning 6 into equal groups; factors of 6
2	Double Trouble	Learn how to double and halve numbers up to eight with the Numberblocks.	Doubling (1, 2, 4, 8) and halving; partitioning 8 into equal groups
2	The Three Threes	When Nine needs a helping hand, he turns into a talented trio – the Three Threes.	Partitioning 9 into 3 equal groups; partitioning is the inverse of combining
2	Odds and Evens	The Numberblocks play a game of bounceball, with Even Tops versus Odd Blocks.	Odd and even numbers; equal groups
2	Fluffies	One finds a furball, two of them tickle Two and soon Numberland is full of fluffies!	Counting (1 to 8); number bonds within 7
2	The Two Tree	The Numberblocks find a magic Two Tree and play an action-packed game of throwing twos.	Subtracting 2 from numbers up to 10; counting in 2s
2	Numberblock Castle	One, Two, Three and Four go on a castle-exploring adventure, making friends along the way.	Adding more than 1 to make 5 to 10
2	Ten Green Bottles	One of Ten's bottles accidentally falls off the wall, setting off a numery hullabaloo.	Subtracting 1; counting (1 to 10); counting down 10 to 1



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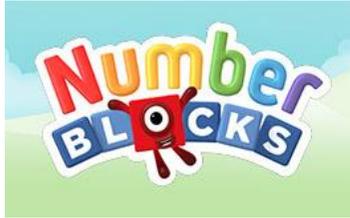
3	Once Upon a Time	A bedtime story all about the first five Numberblocks.	A review of numbers 1 to 5
3	Blockzilla	A monster tale of a colossal creature who really, really likes bigger numbers.	Comparison of numbers 1 to 5 using the language of 'greater than' and 'less than'
3	The Numberblocks Express	Learn all the number bonds up to five with the Numberblocks.	Composition of 5; partitioning and combining 5 in different ways
3	Fruit Salad	Find out how to split numbers into smaller numbers with the Numberblocks.	Composition of numbers to 5; exploring the part-part-whole model to partition and combine numbers to 5
3	Zero	Learn all about the number zero with Numberblock Zero.	Introducing the concept of zero; zero is one less than 1 and an absence of something
3	Now We Are Six to Ten	Learn all about the numbers 6, 7, 8, 9 and 10 with the Numberblocks.	A review of numbers 6 to 10
3	Numberblobs	Sing along to the Numberblocks counting song with the Numberblocks' favourite friends.	Counting to 10
3	Building Blocks	When an alien ship crashes in Numberland, the Numberblocks help the alien get back home.	Building with blocks and exploring space and pattern
3	Peekaboo!	The number friends take turns hiding behind each other in a song about bigger and smaller.	Comparison of numbers to 10 using the language of 'bigger than', 'smaller than' leading to 'greater than' and 'less than'
3	Hiccups	Every time Nine hiccups, he falls to pieces – until the others find an unexpected cure.	Composition of numbers to 10; partitioning and combining numbers in different ways
3	What's the Difference?	Seven shows the others how to be lucky: ask a number friend to jump on your head!	Comparison of numbers to 10; finding the difference to make 7
3	Numberblock Rally	Ten riders, ten pedal-powered cars. Welcome to the Numberblock Rally!	Subtraction
3	Five and Friends	Six to Ten discover they are all Five-and-a-friend.	Numbers 6 to 10 are made from 5 and a 'bit'
3	Octoblock to the Rescue!	The naughty Terrible Twos are making custard pies. Can Octoblock's friends save the day?	Pairs of numbers that total 8
3	Ten Again	When the number friends all want to do different things, Ten finds a way to do them all.	Pairs of numbers that total 10
3	Flatland	Four visits Flatland, where the flat shapes live, and becomes a real square.	2D shape



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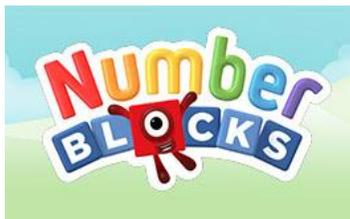
3	Pattern Palace	One crosses the pattern puzzle paths over the magic moats to get to the Pattern Palace.	Pattern
3	The Legend of Big Tum	A monster with a big hairy tummy who loves puzzles? Find out who is in Big Tum's tum!	Problem solving and finding the missing number
3	Mirror, Mirror	One makes a wish that the magic mirror could make lots of friends at once.	Adding multiples of the same number
3	The Wrong Number	Learn how to be a number detective with the Numberblocks.	Problem solving – reasoning about number
3	The Way of the Rectangle	Twelve shows the other Numberblocks how to master the way of the rectangle.	Learn about numbers that make rectangle shapes (arrays)
3	Block Star	Twelve goes on a mission to save Numberland from the mysterious Block Star.	Partition 12 into equal groups
3	Ride the Rays	A fantastic treat awaits the Numberblocks at the top of Ray Canyon.	Solve problems involving arrays
3	Eleven	The Numberblocks make a new friend, football fan Eleven.	Number 11; 11 is 10 and 1
3	Twelve	Ten and two make Twelve, who discovers that she is a super-rectangle.	Number 12 and arrays
3	Fourteen	Meet extreme Fourteen, the plucky skateboarder.	Number 14; 14 is 10 and 4
3	Fifteen	Hush, hush! Agent Fifteen is here with a new way to save the day.	Number 15; 15 is 1+2+3+4+5
3	Tween Scenes	It's time for a bedtime story about all Numberblocks Eleven to Fifteen.	Exploring numbers 11, 12, 13, 14, and 15
3	Thirteen	Unlucky Thirteen falls apart whenever anyone mentions his name.	Number 13; 13 is 10 and 3
3	Step Squads	Only Step Squad can save One's balloon – but what if there's more than one Step Squad?	Other numbers made of consecutive numbers (3, 6, 10 and 15)



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4	Fifteen's Minute of Fame	The Numberblocks put on a talent show of terrific number tricks.	Numbers 1 to 15
4	On Your Head	When their numberlings fall off, the Numberblocks have to work out who they are.	Place value numbers 1 to 15
4	Ten's Place	Trainer Ten puts her friends through their paces with a high-energy number workout.	Learn about numbers that are 'ten and a bit'
4	Balancing Bridge	It's all in the balance as the Numberblocks try to make it across a very wobbly bridge.	Learn more about numbers that are 'ten and a bit' and adding
4	Sixteen	Learn all about the number 16 with Numberblock Sixteen!	Learn all about the number 16; 16 is 10 and 6
4	Square Club	Things get out of hand at a Square Club meeting. Can anyone save the day?	The structure of numbers up to 16 that make squares
4	Seventeen	Meet the artist known as Seventeen, who likes to paint 17 of everything.	Learn all about the number 17; 17 is 10 and 7
4	Eighteen	Meet Eighteen, the super speedy rectangle who was born to ride the rays.	Learn all about the number 18; 18 is 10 and 8
4	Loop the Loop	Super rectangle Eighteen shows the others how to ride the rays on the super-duper looper.	Learn more about numbers that can make rectangle shapes (arrays)
4	Nineteen	New Numberblock Nineteen discovers she is a one-off with a hidden talent.	Learn all about the number 19; 19 is 10 and 9
4	Twenty	Numberblock Twenty struts his stuff and dances the Two Tens Tango.	Learn all about the number 20; 20 is two tens
4	Tall Stories	It's time for a bedtime story about all Numberblocks Sixteen to Twenty.	Numbers 16 to 20
4	Flights of Fancy	Rocket Ten and friends blast off into space for a rhyming adventure.	Explore numbers 11 to 20 as ten-and-a-friend
4	I Can Count to Twenty	The Numberblobs challenge Twenty to a singing count-off.	Counting in steps forward and back
4	Heist	Can Sixteen to Twenty sneak past the robot guards at the Museum of Numbers?	Properties of numbers to 20
4	Sign of the Times	Super-speedy Eighteen discovers a faster way to add a number together lots of times.	Multiplication as repeated addition



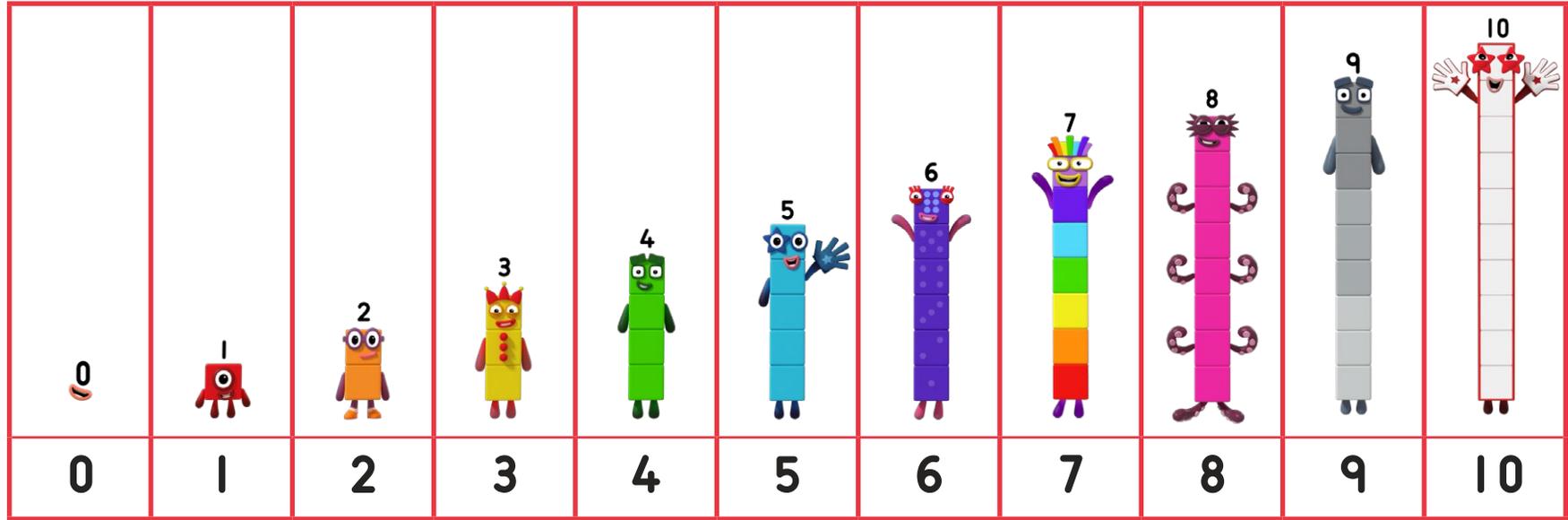
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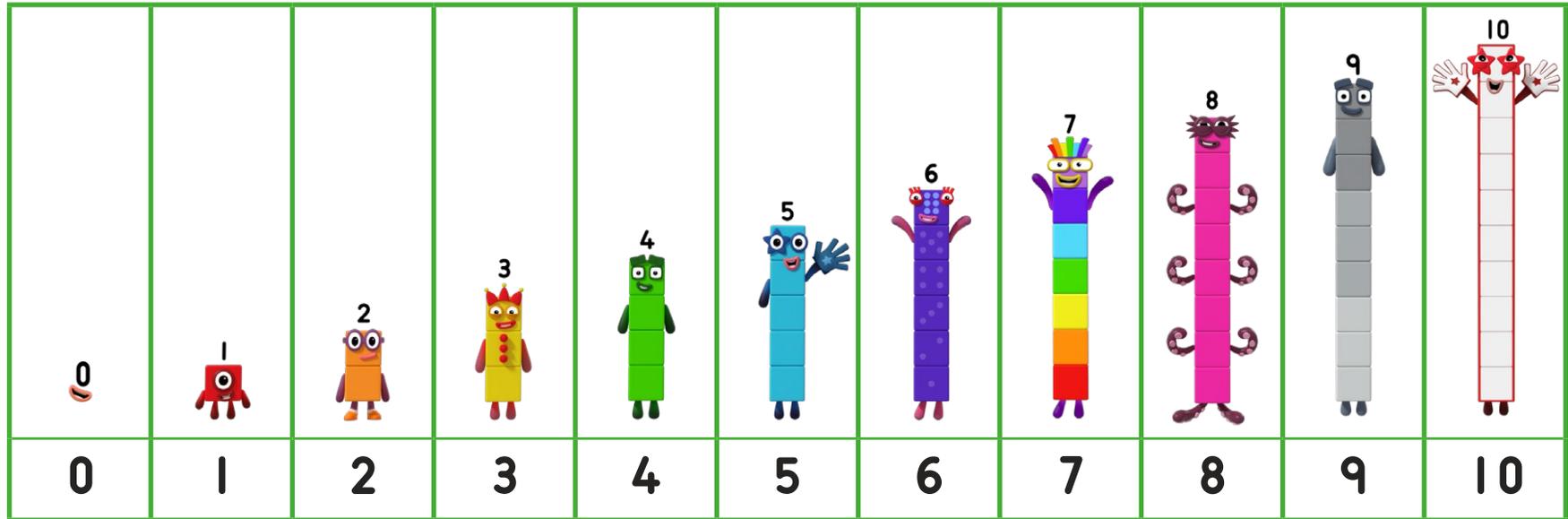
4	Fun Time Fair	Twelve helps the Numberblobs work out how many tokens they need for each fairground ride.	Multiplication as repeated addition
4	The Lair of Shares	Can One and friends escape the Lair of Shares?	The sharing structure of division
4	Terrible Twosday	Who can stop the invasion of the Terrible Twos?	The grouping structure of division
4	Divide and Drive	Three invites the other Numberblocks to her super new go-kart track.	Division involving the grouping structure
4	Twenty One and On	Twenty and chums find out what happens when you go past bus stop 20.	Learn about the numbers 21, 22 and 23
4	We're Going on a Square Hunt	The squares explore an ancient temple in search of a really, really big square.	Learn more about square numbers
4	Thirty's Big Top	Welcome to the Big Top, where Thirty and friends show off their circus tricks.	Learn about the numbers 30, 40 and 50
4	Land of the Giants	Five and friends discover a way to make themselves ten times bigger!	Learn how to count, add and think in multiples of 10
4	Fifty	Superstar Fifty rocks out the Numberland stadium with her shining gold guitar.	Count in steps of 5
4	Sixty's High Score	It's time to meet Sixty and friends in a rocket-powered game of How Many Tens.	Learn about the numbers 60, 70, 80
4	The Big One	One has found a way to keep adding Ones all the way to Ninety-nine. What comes next?	Learn to count to 99
4	One Hundred	One Hundred shows us what she's made of in a big song about being big.	Introduction to 100
4	One Thousand and One	One wonders if anyone could be bigger than One Hundred.	Learn about huge numbers
4	More to Explore	It's time for the grand finale but the number fun doesn't stop here.	Numbers are everywhere



Numberblocks
0 - 10
Number Track



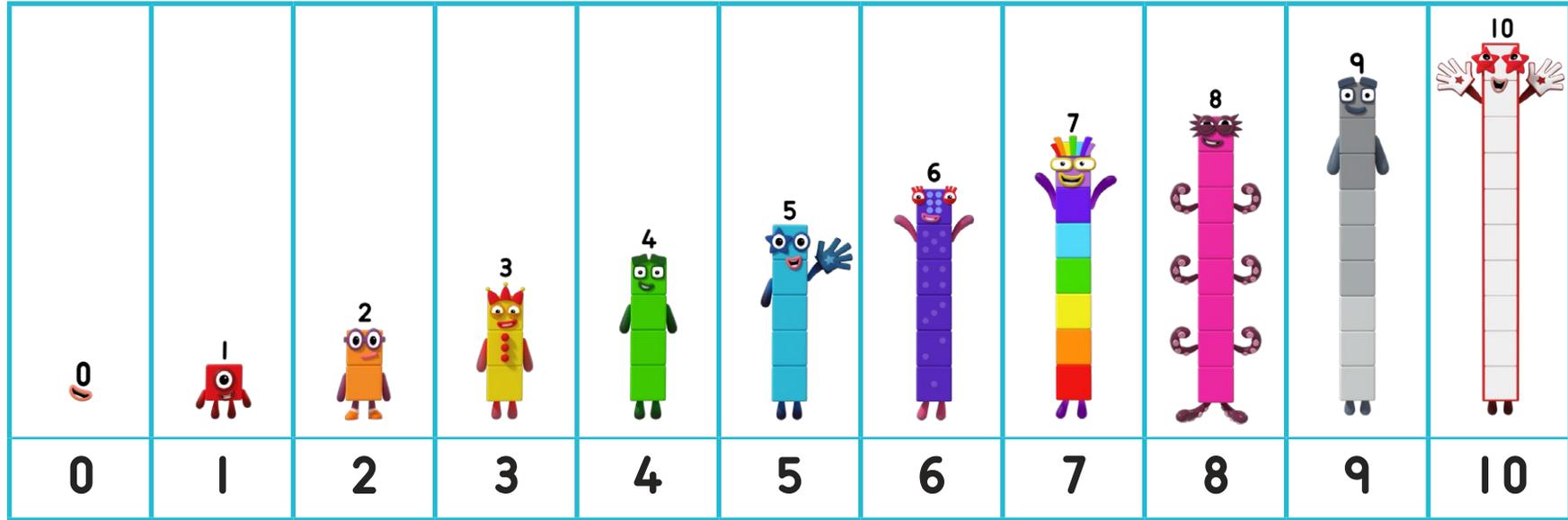
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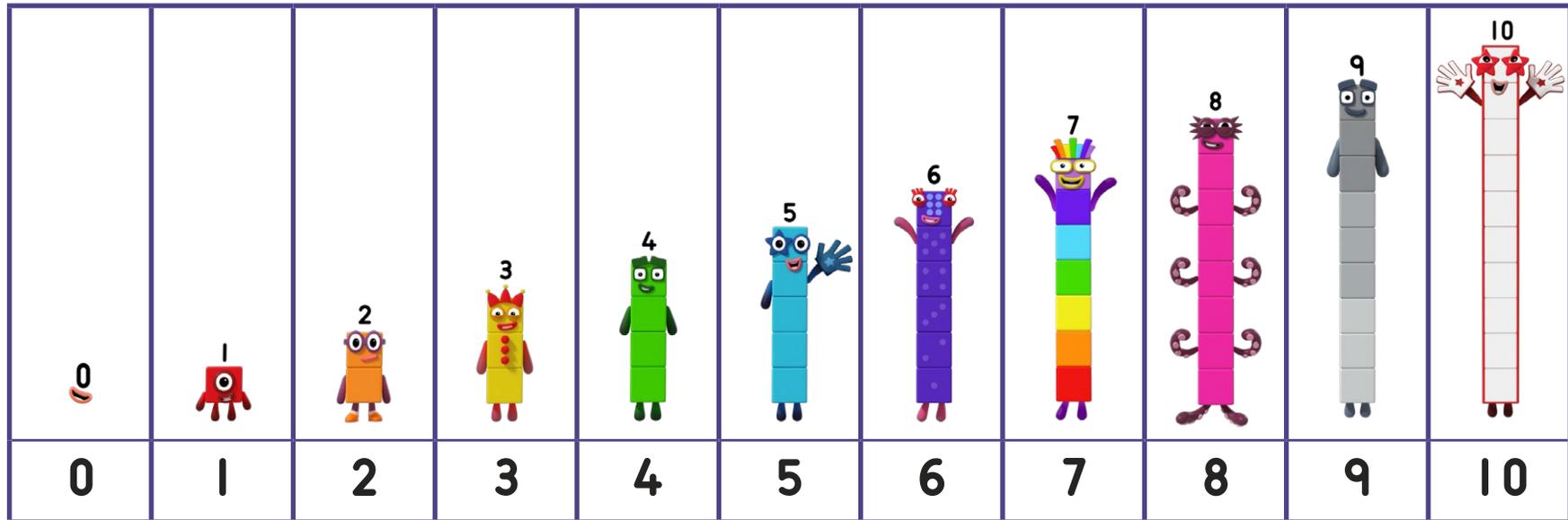
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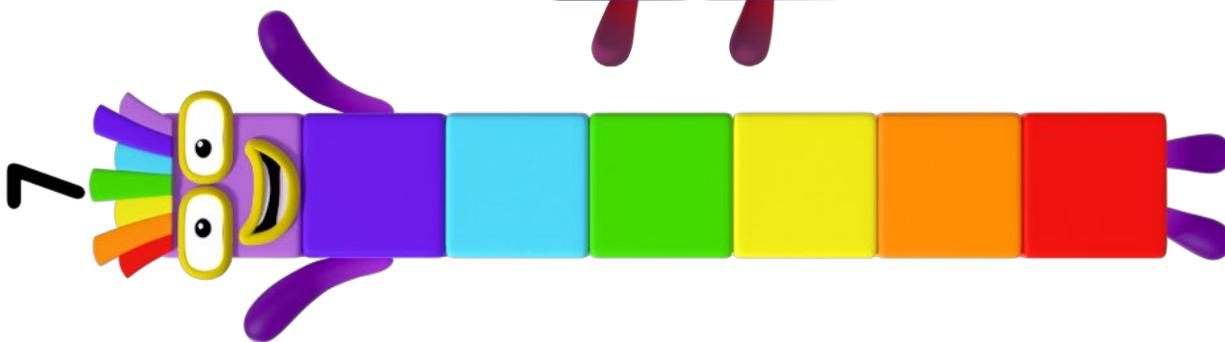
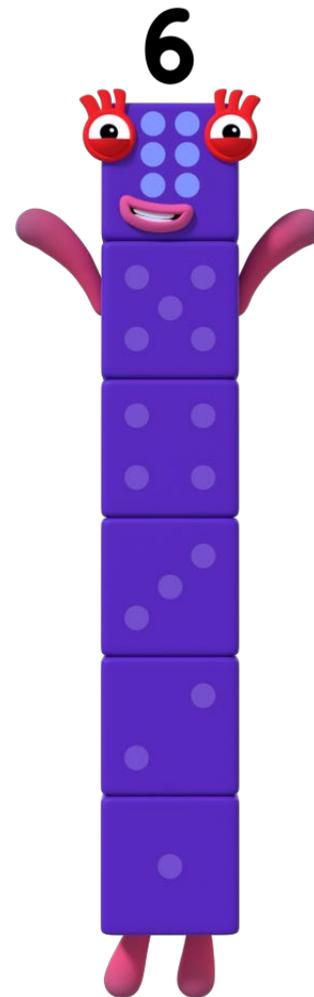
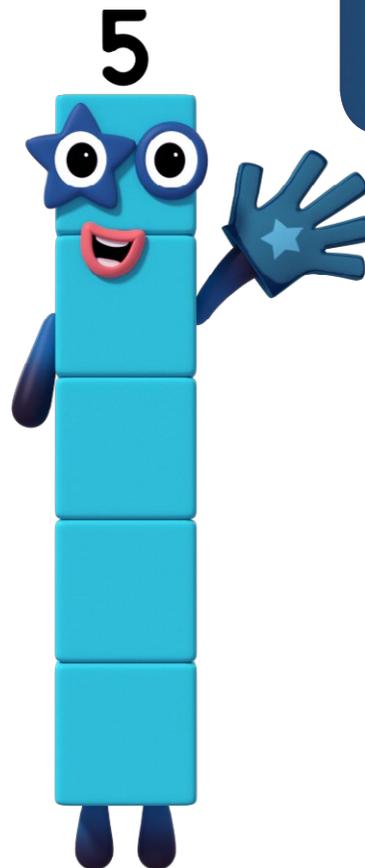
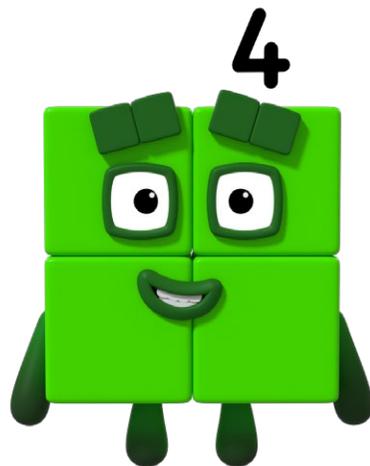
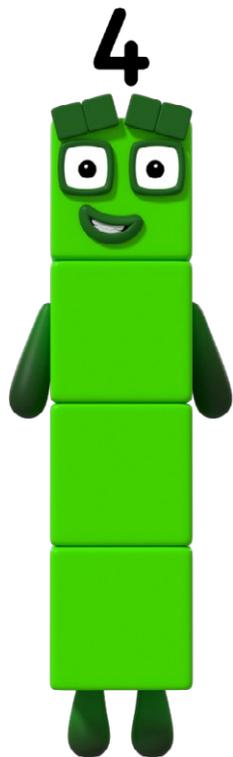
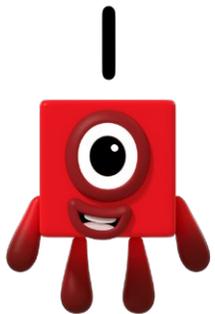
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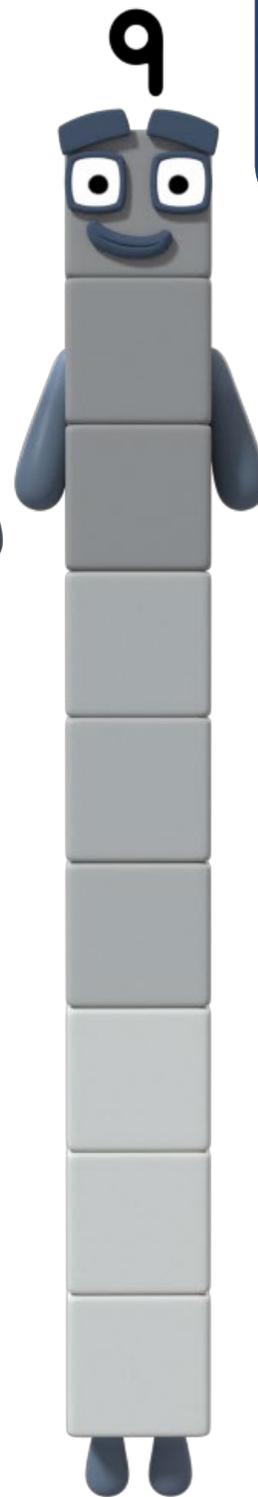
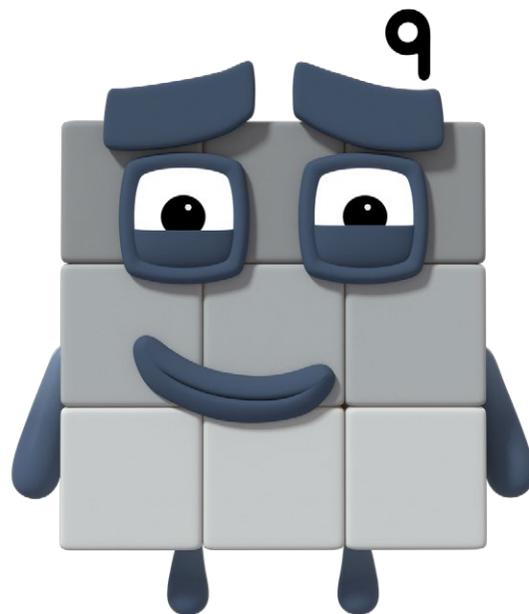


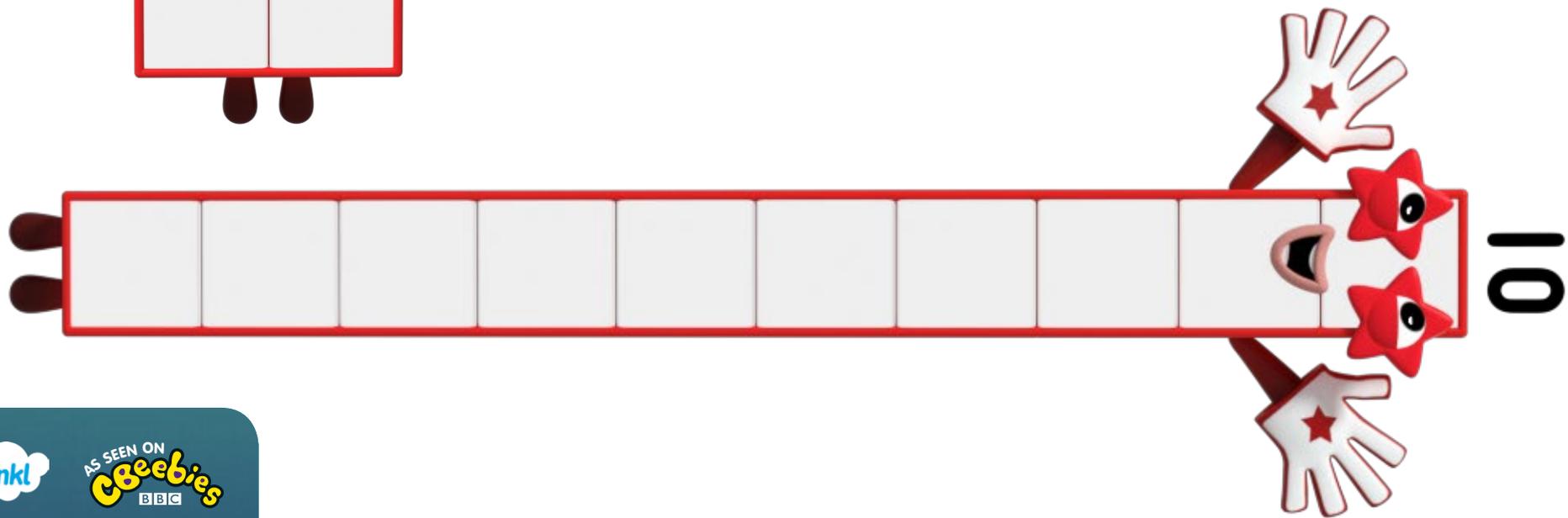
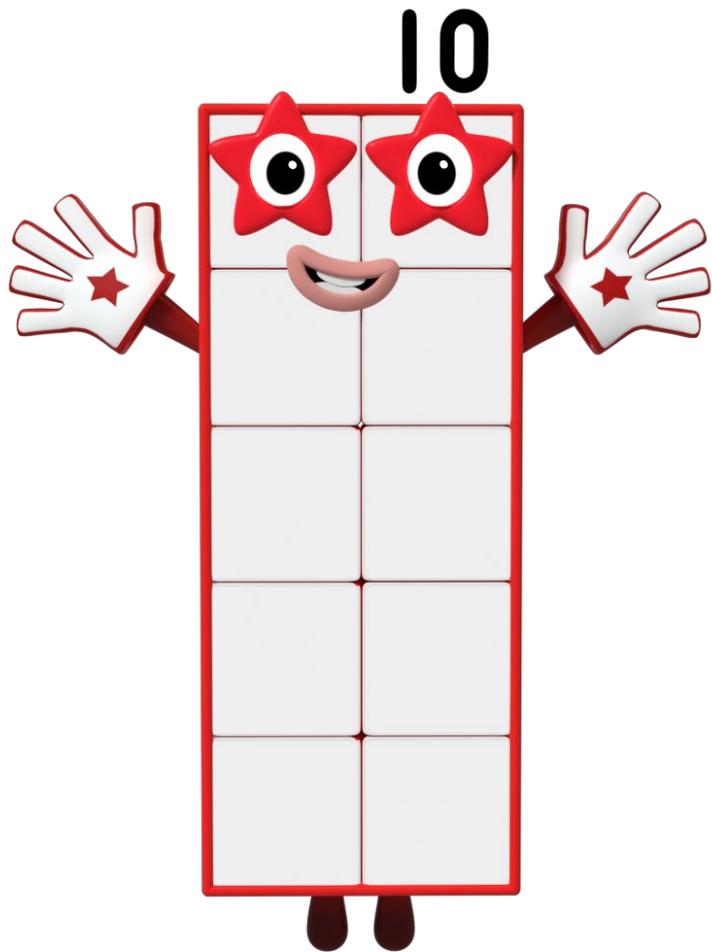
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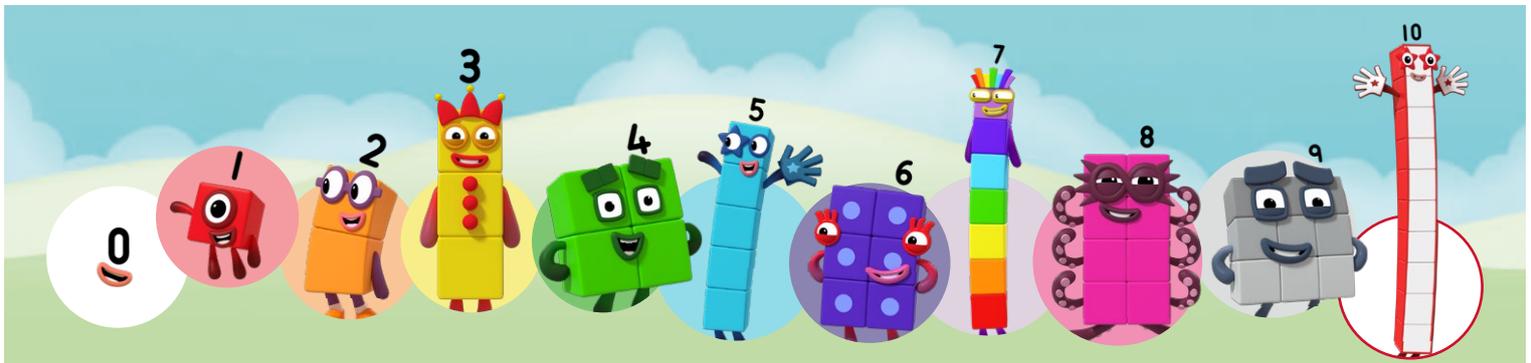
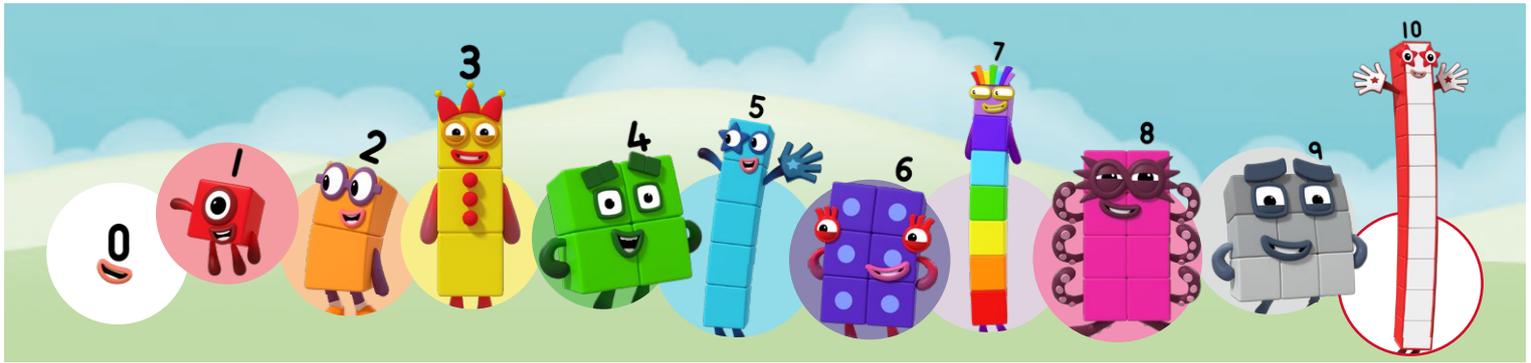
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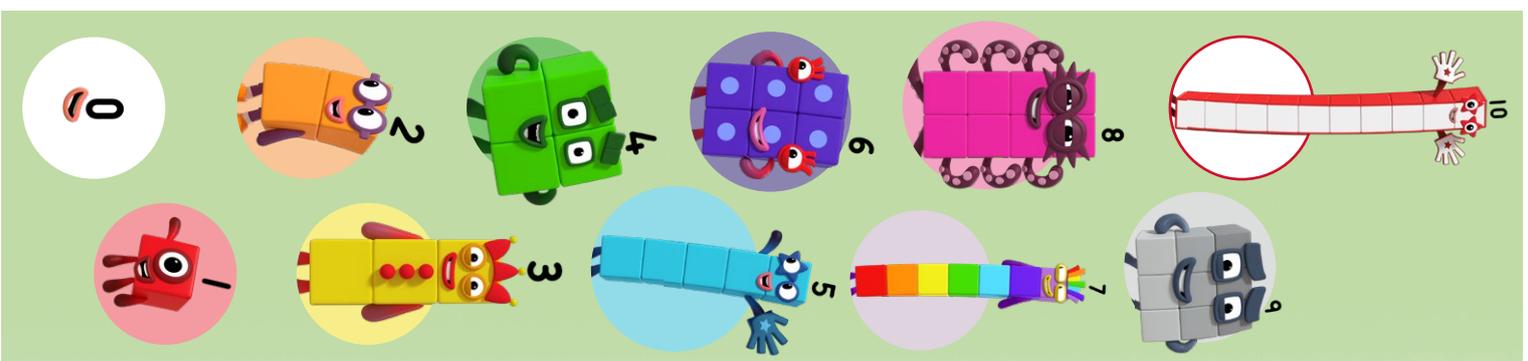
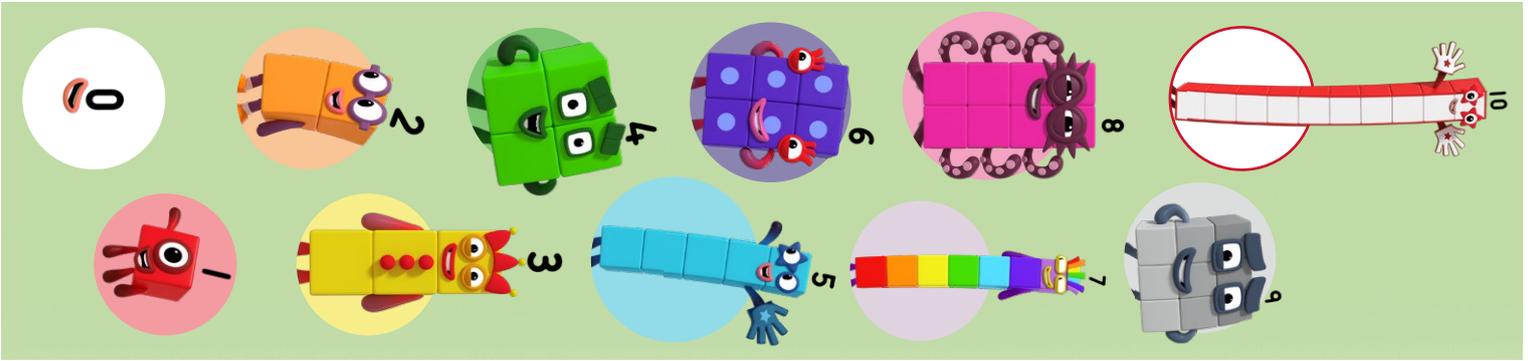
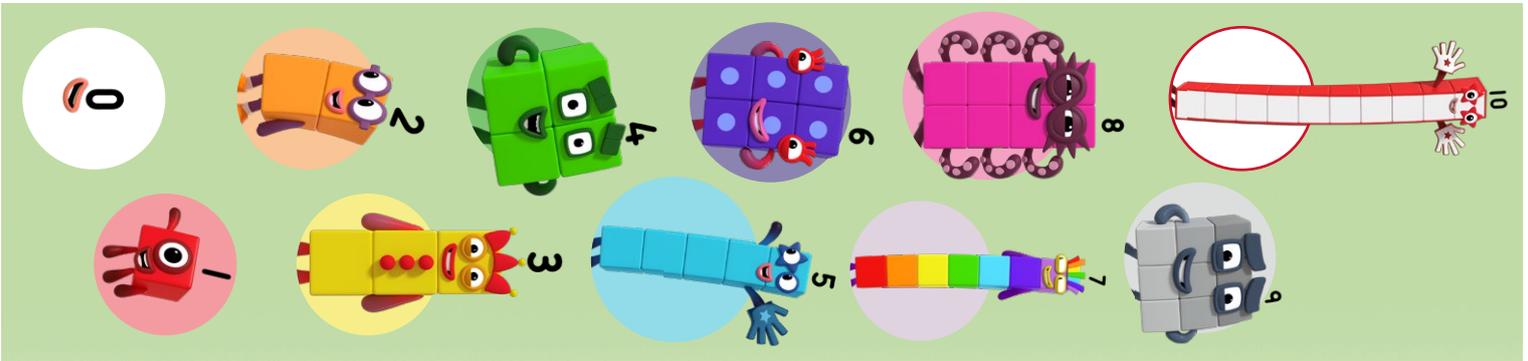
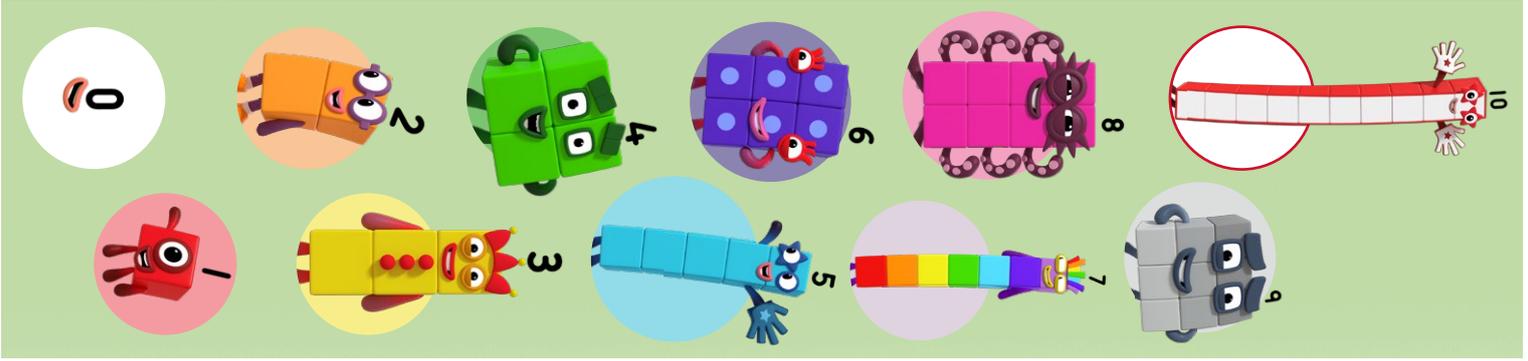


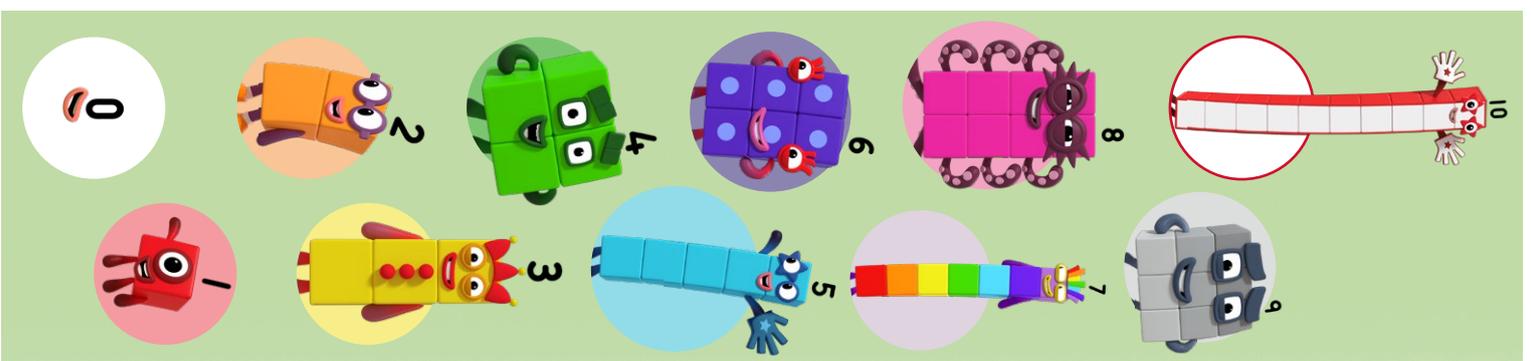
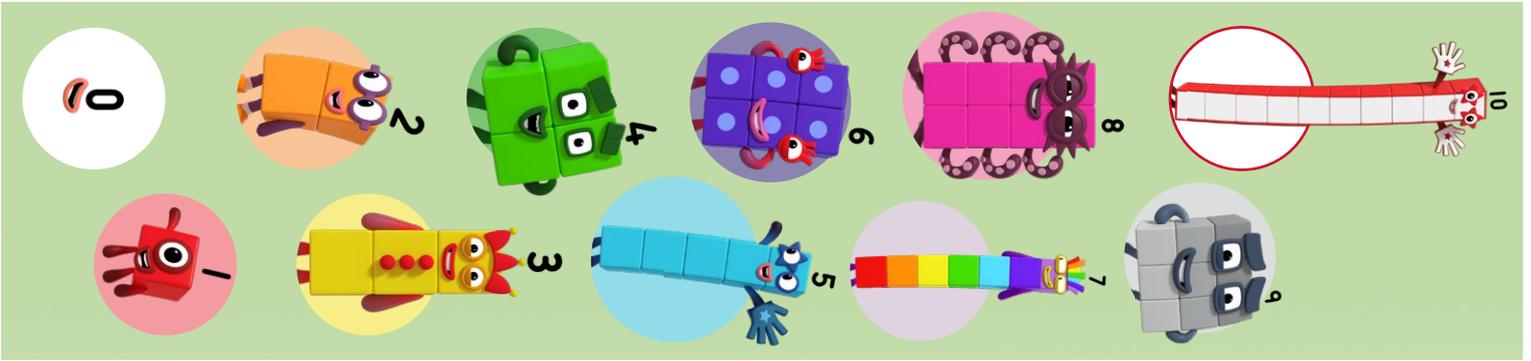
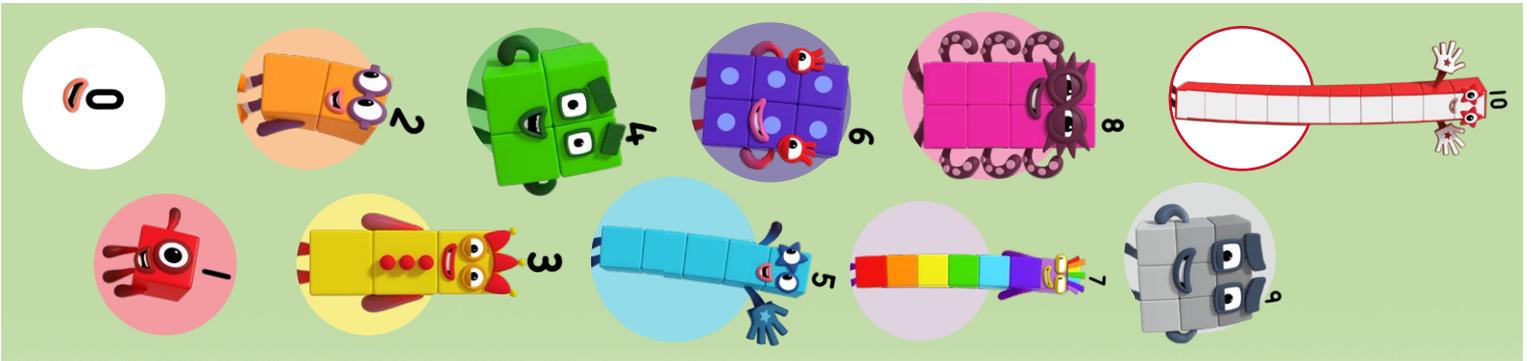
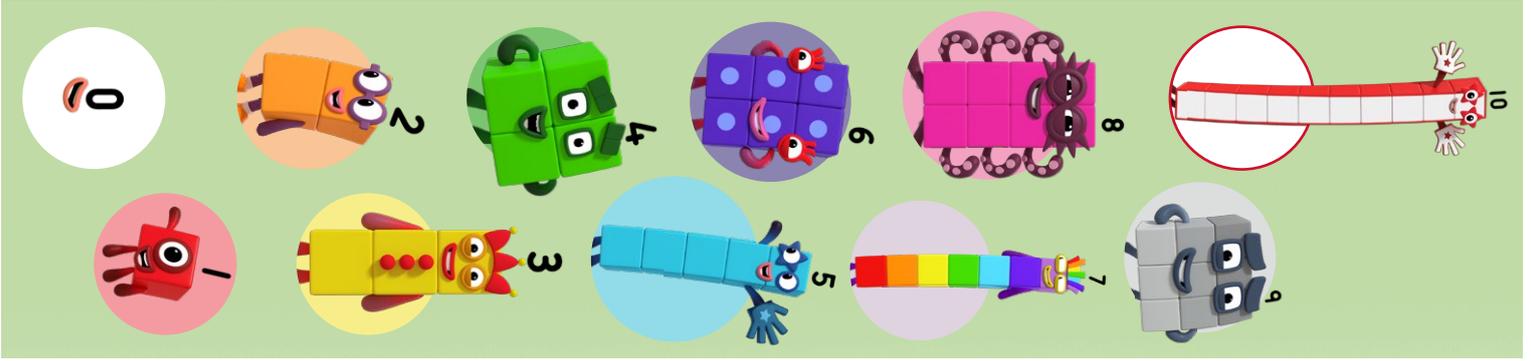






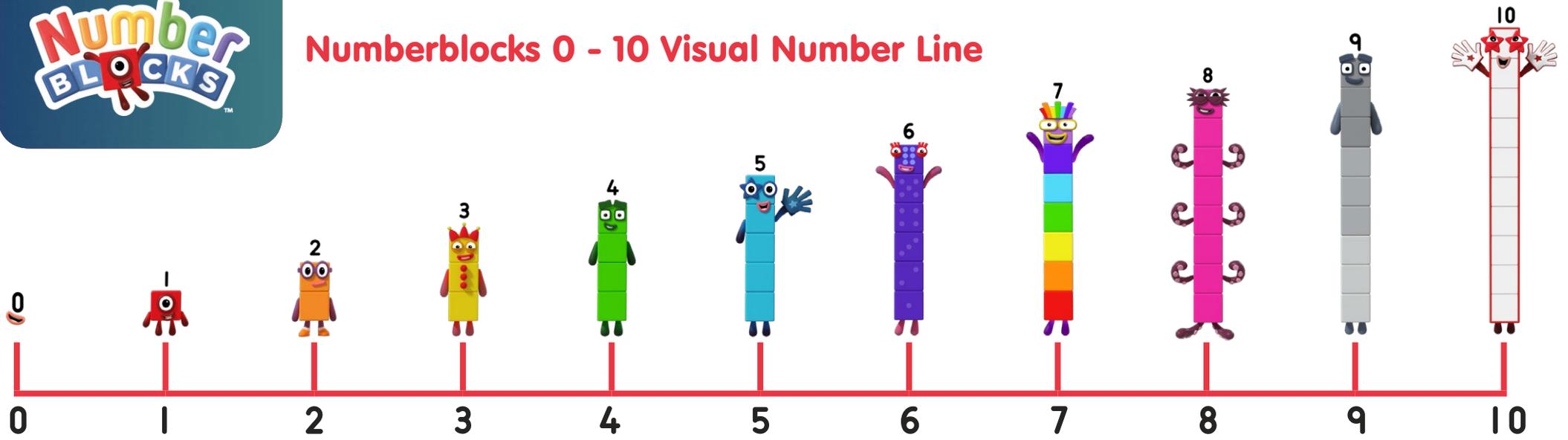




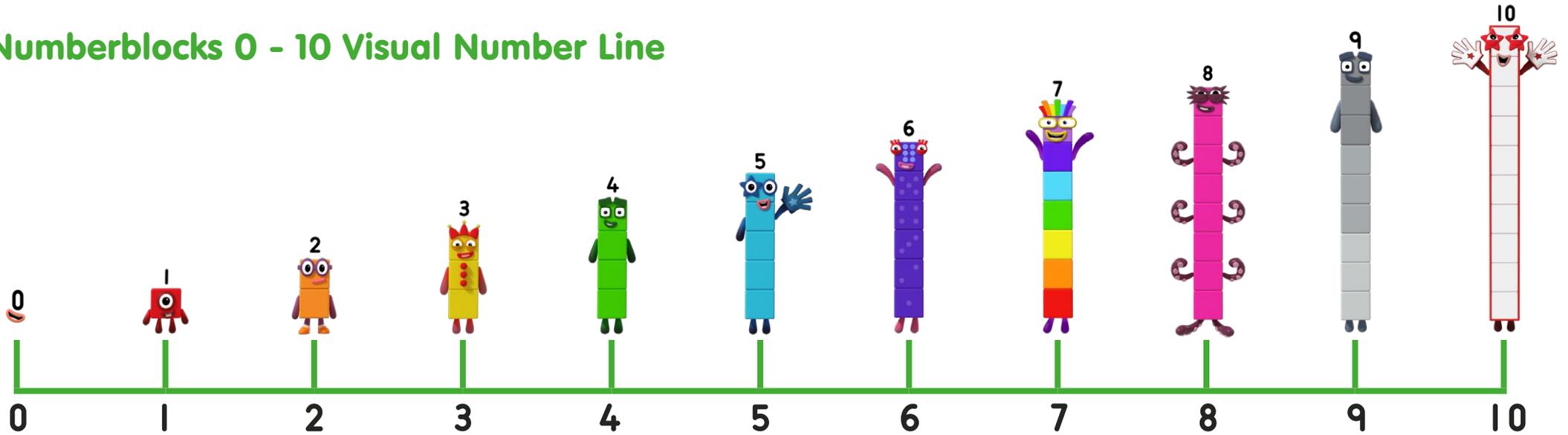




Numberblocks 0 - 10 Visual Number Line



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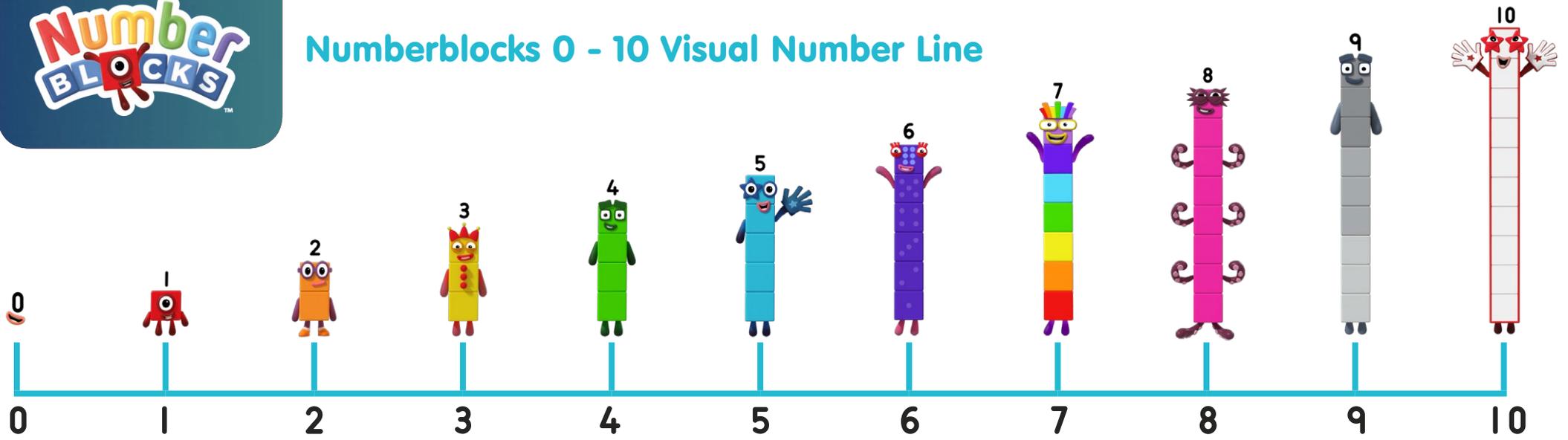
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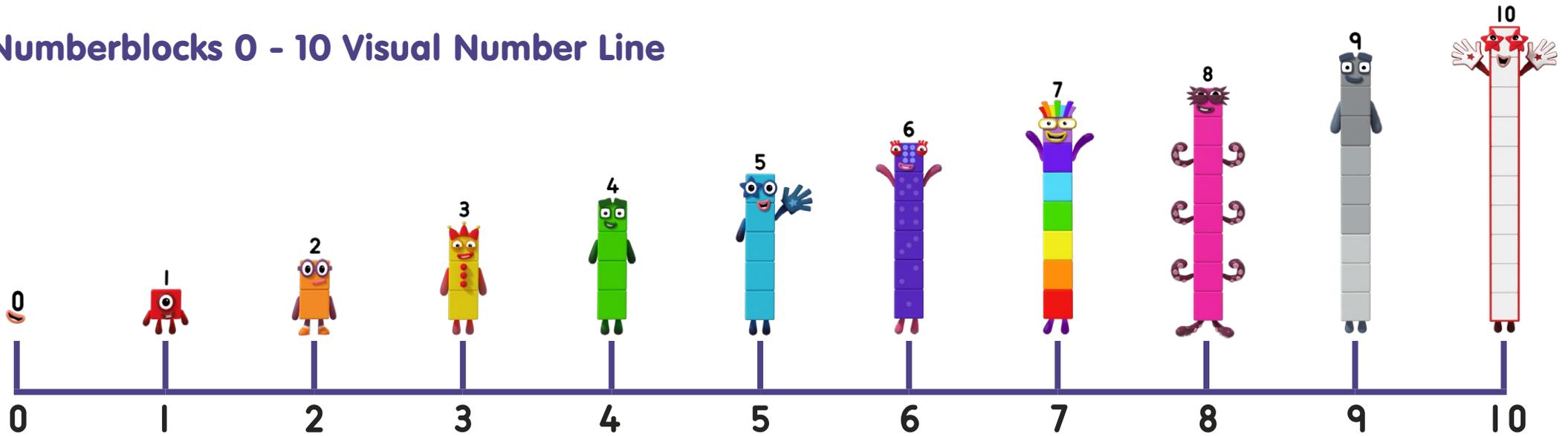
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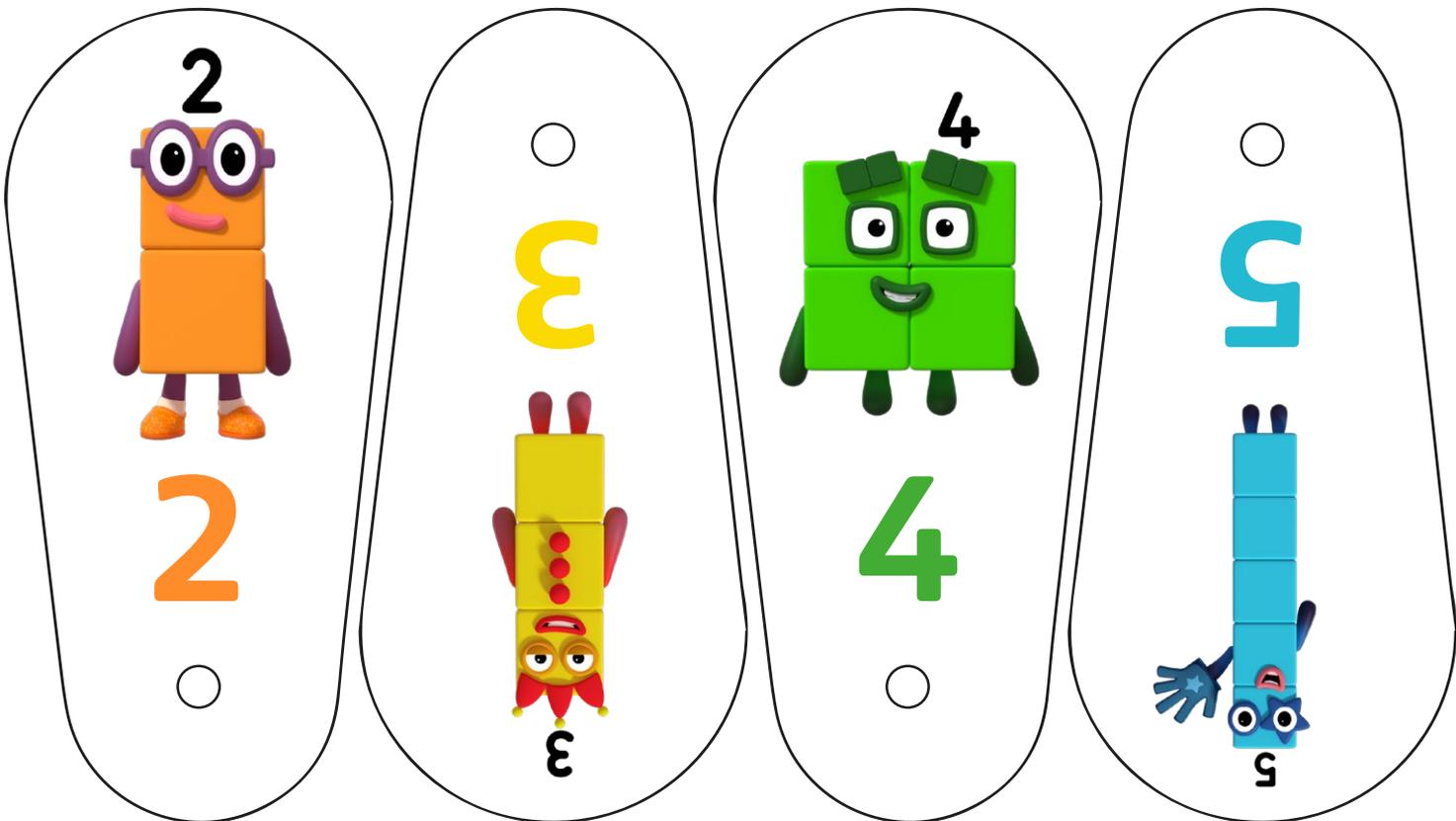
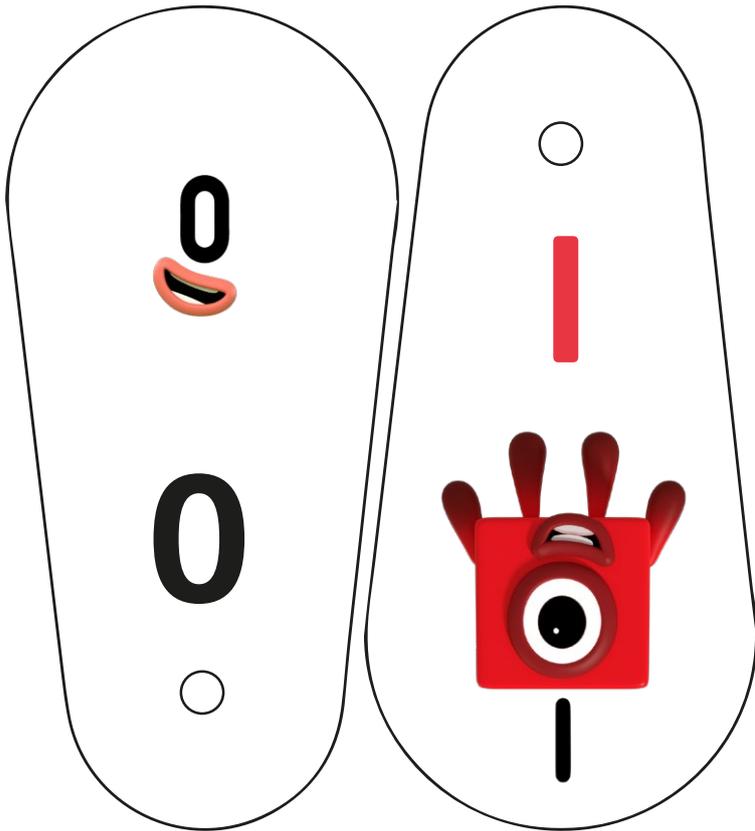
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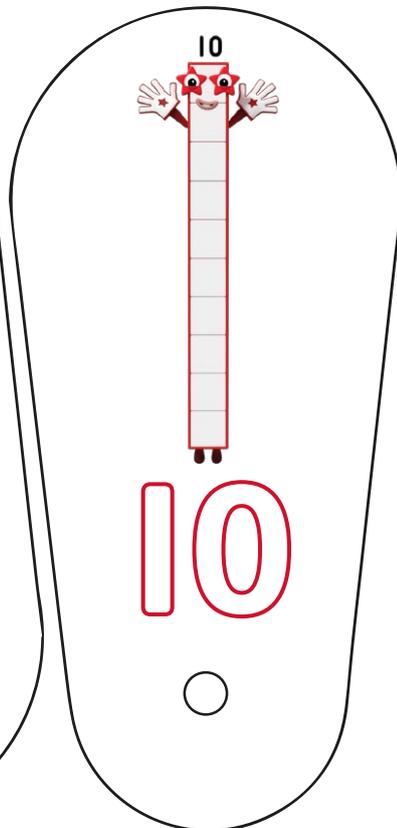
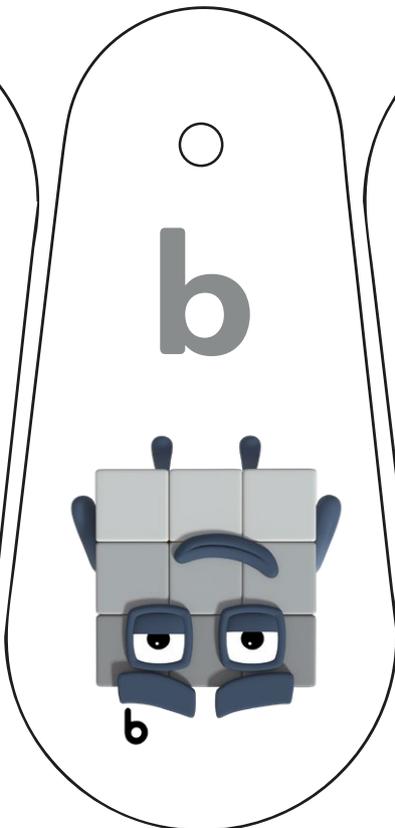
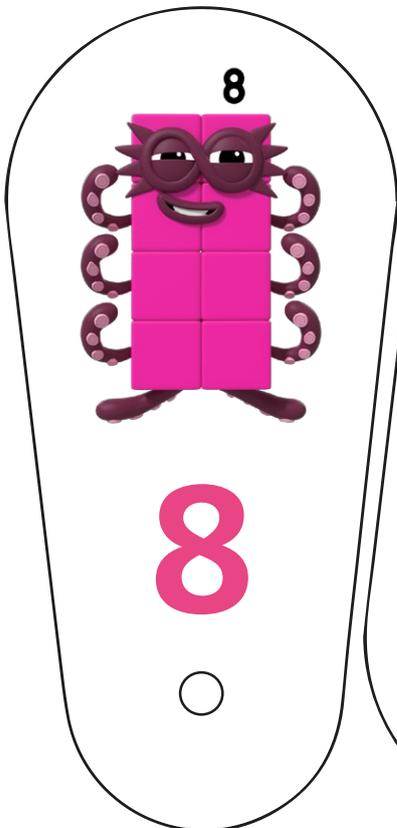
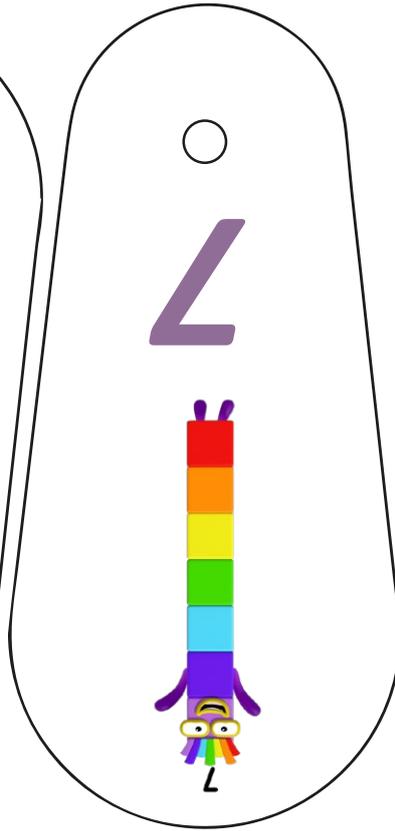
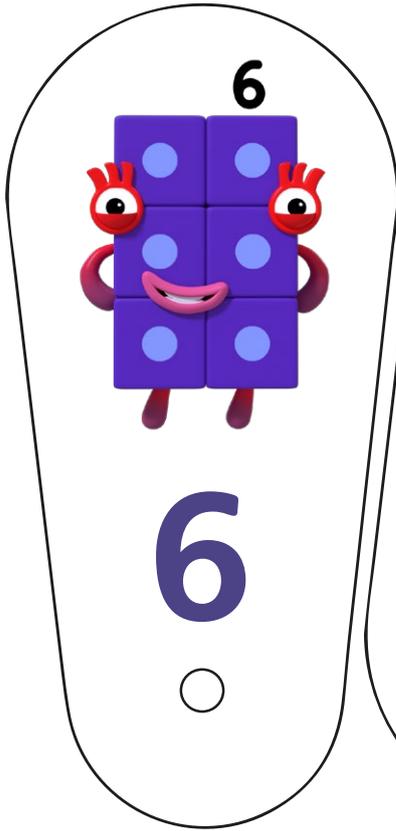


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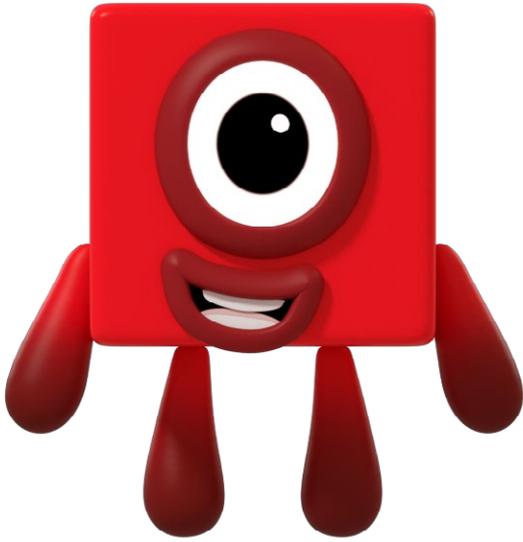


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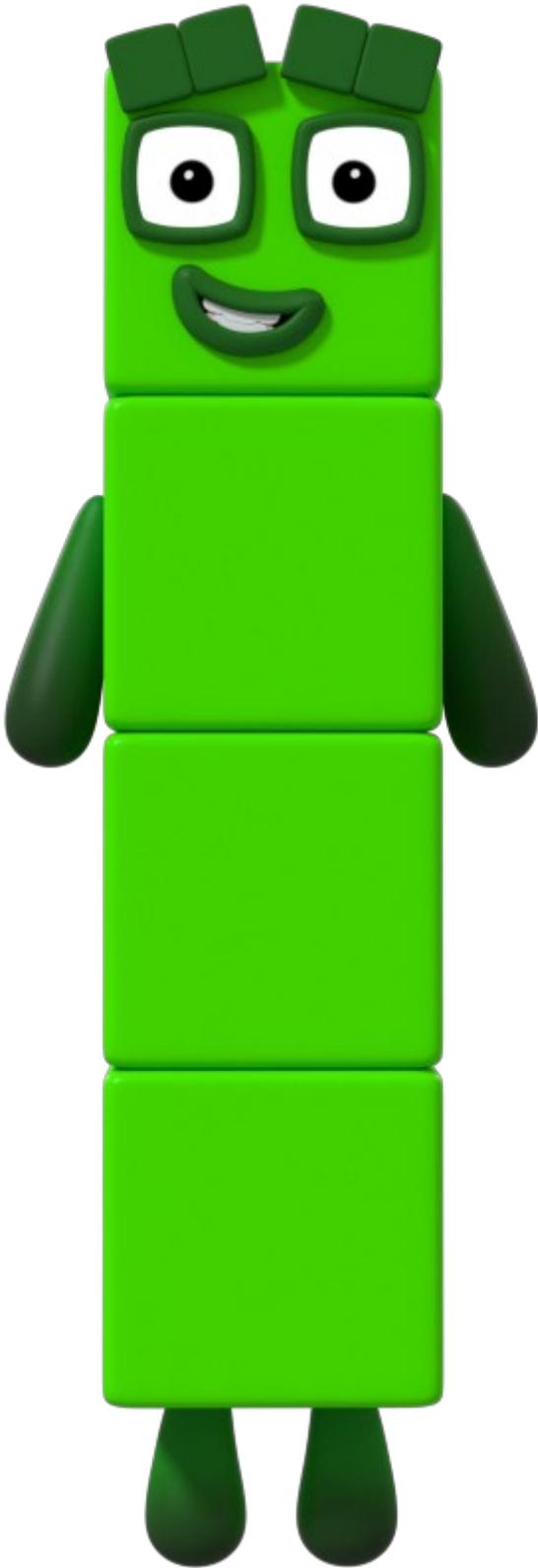
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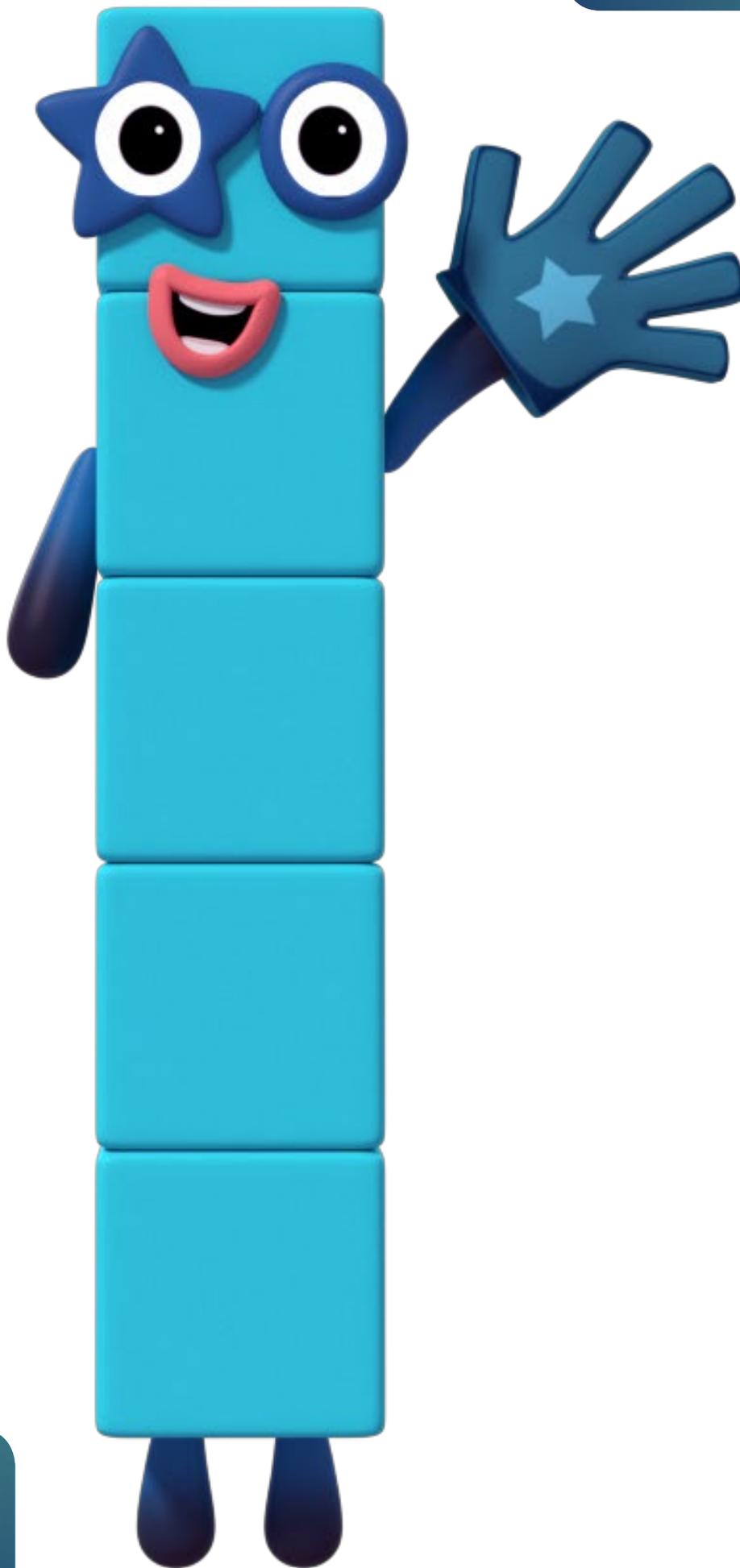
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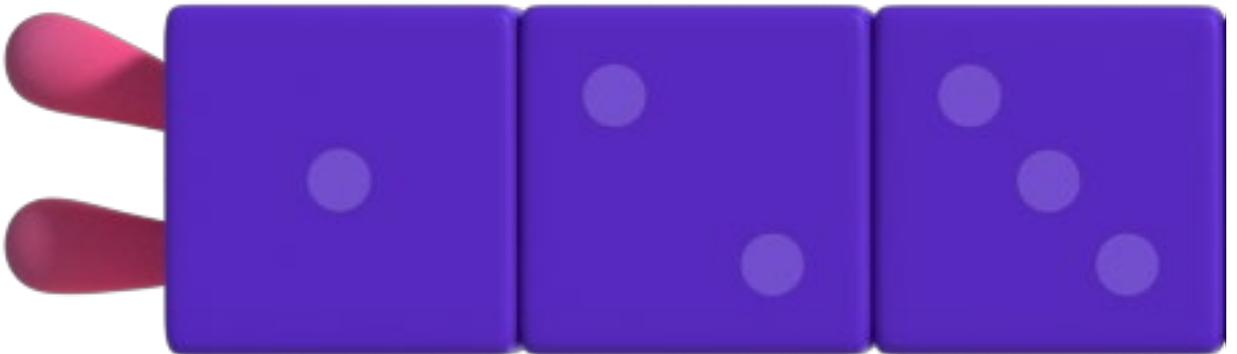
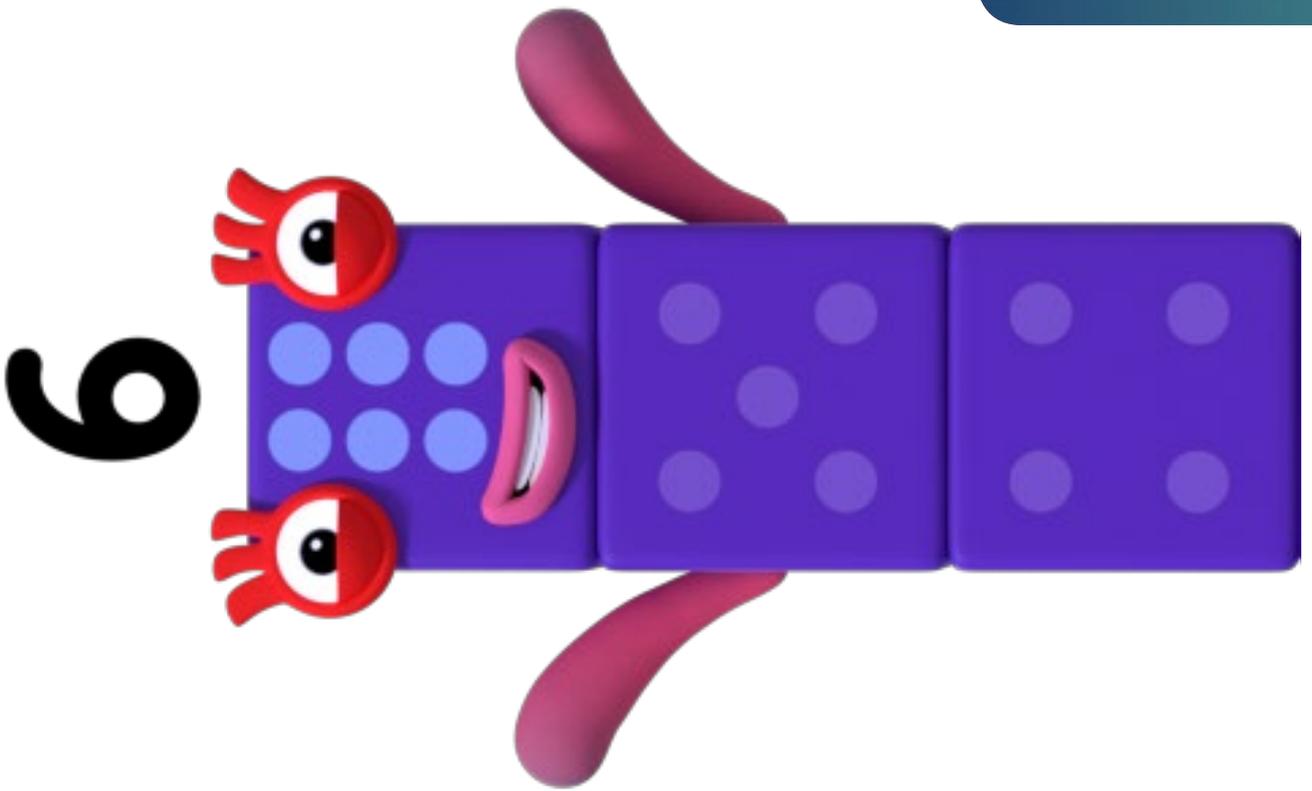
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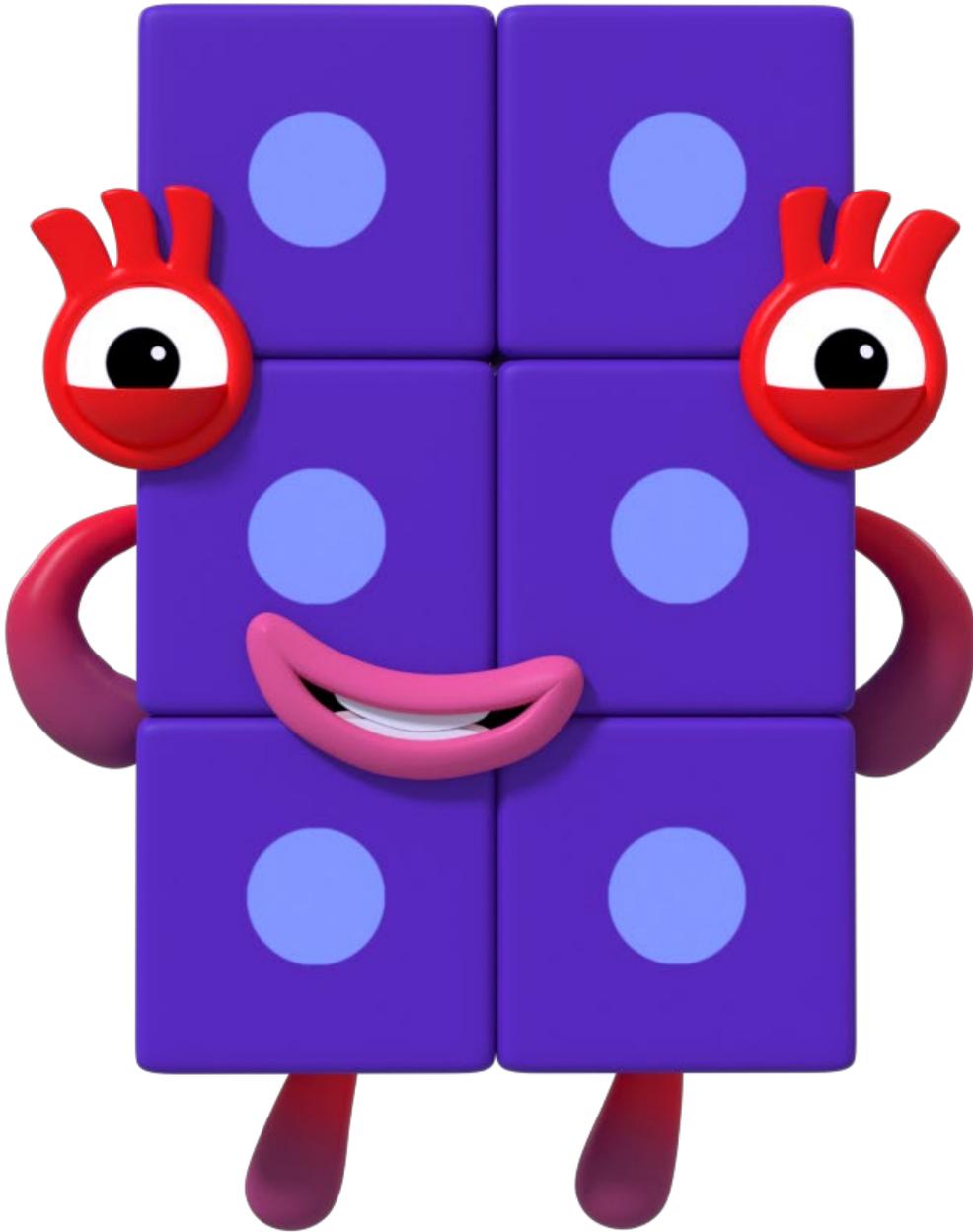
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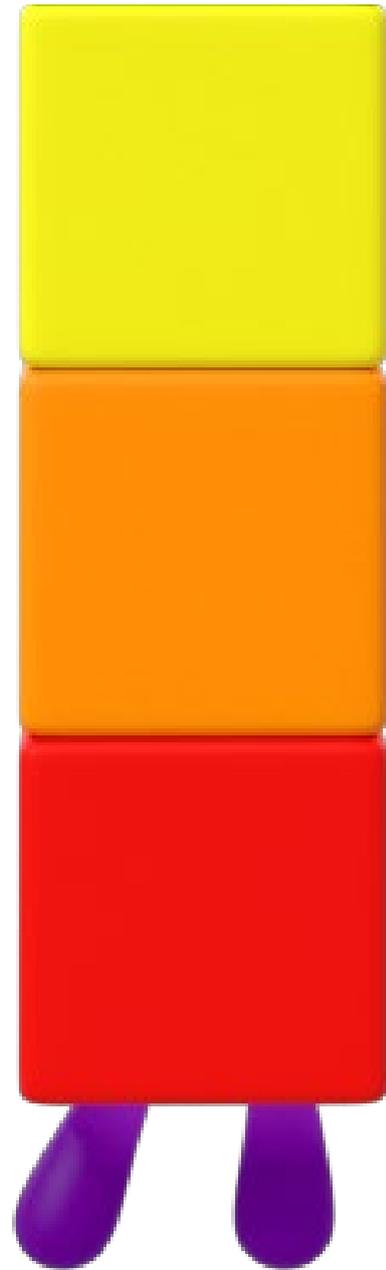
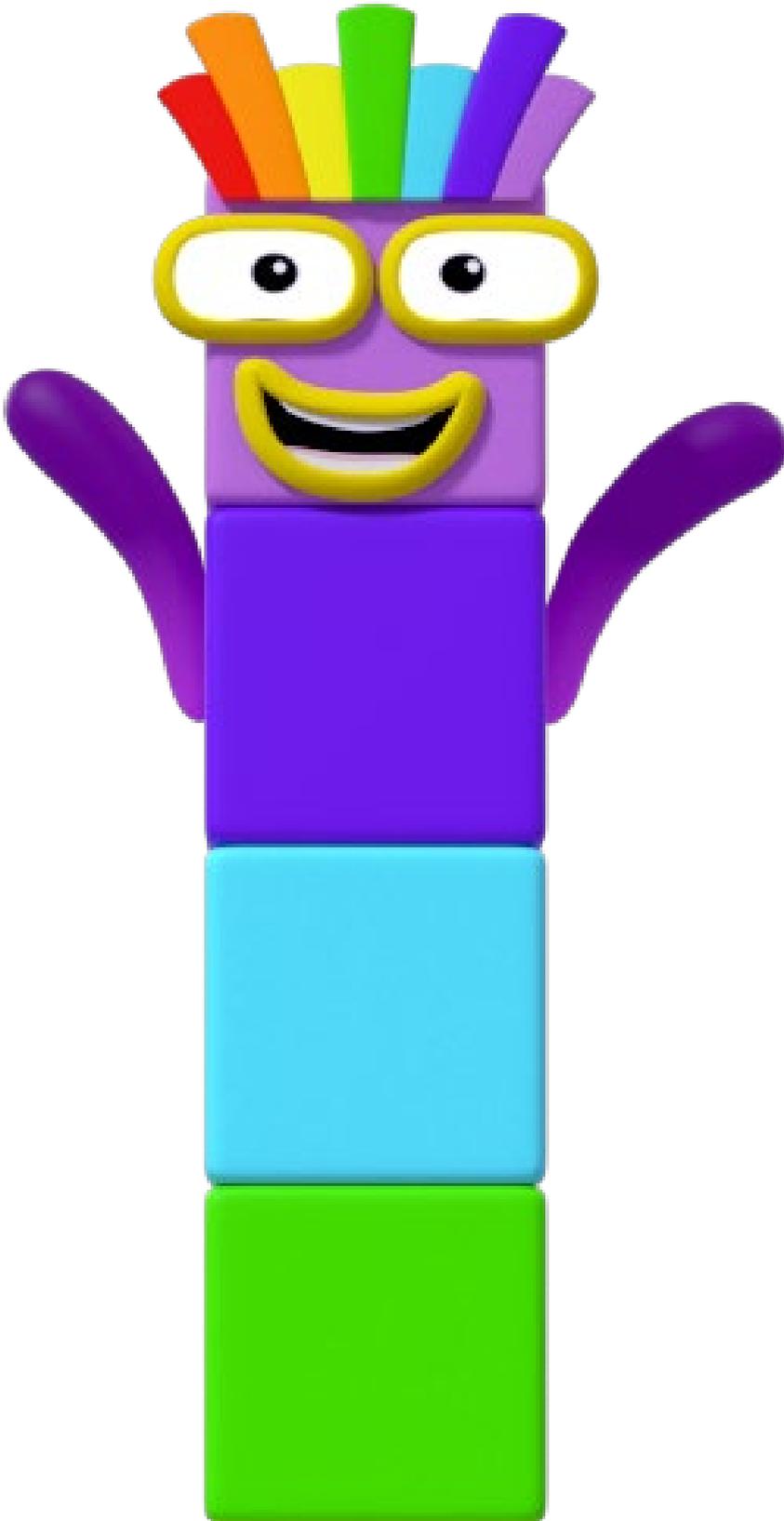
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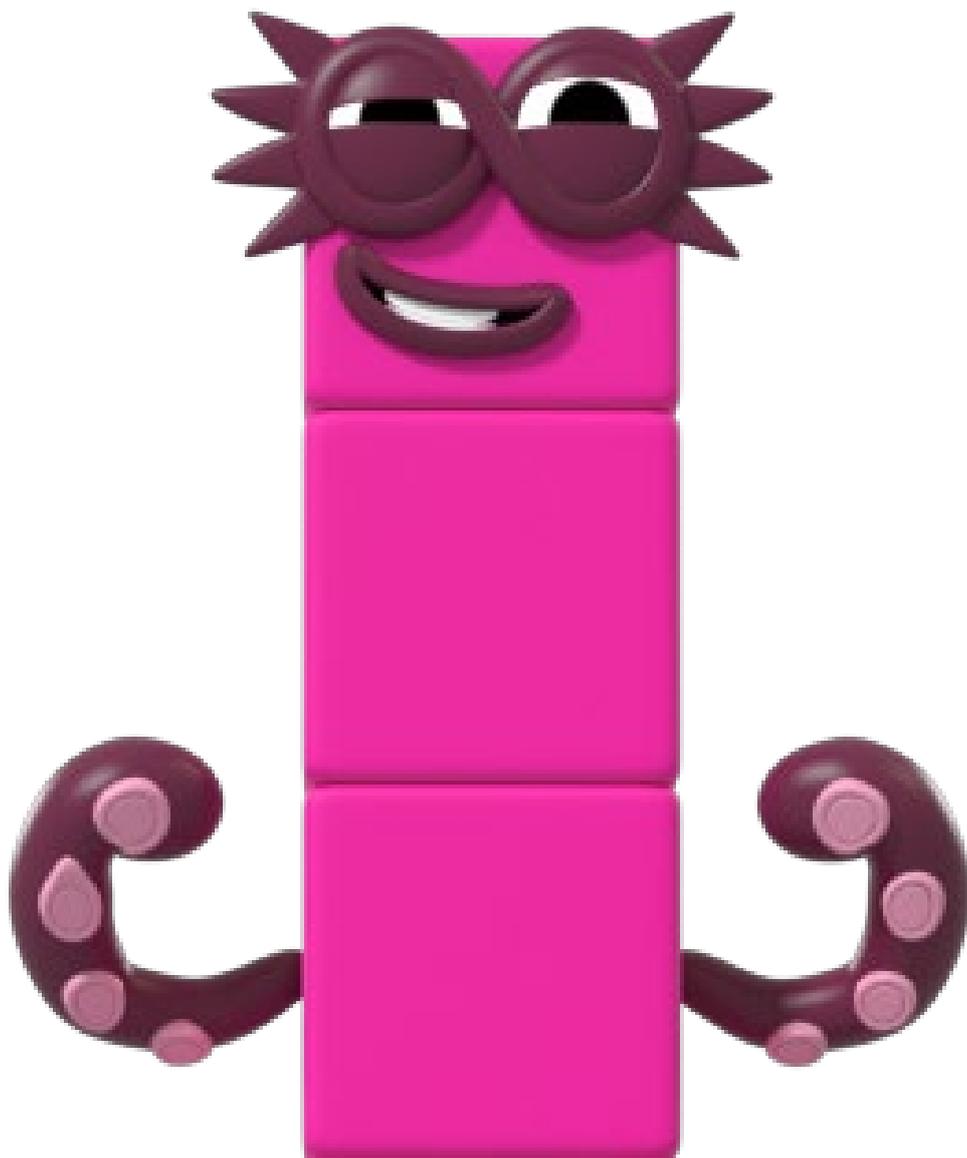
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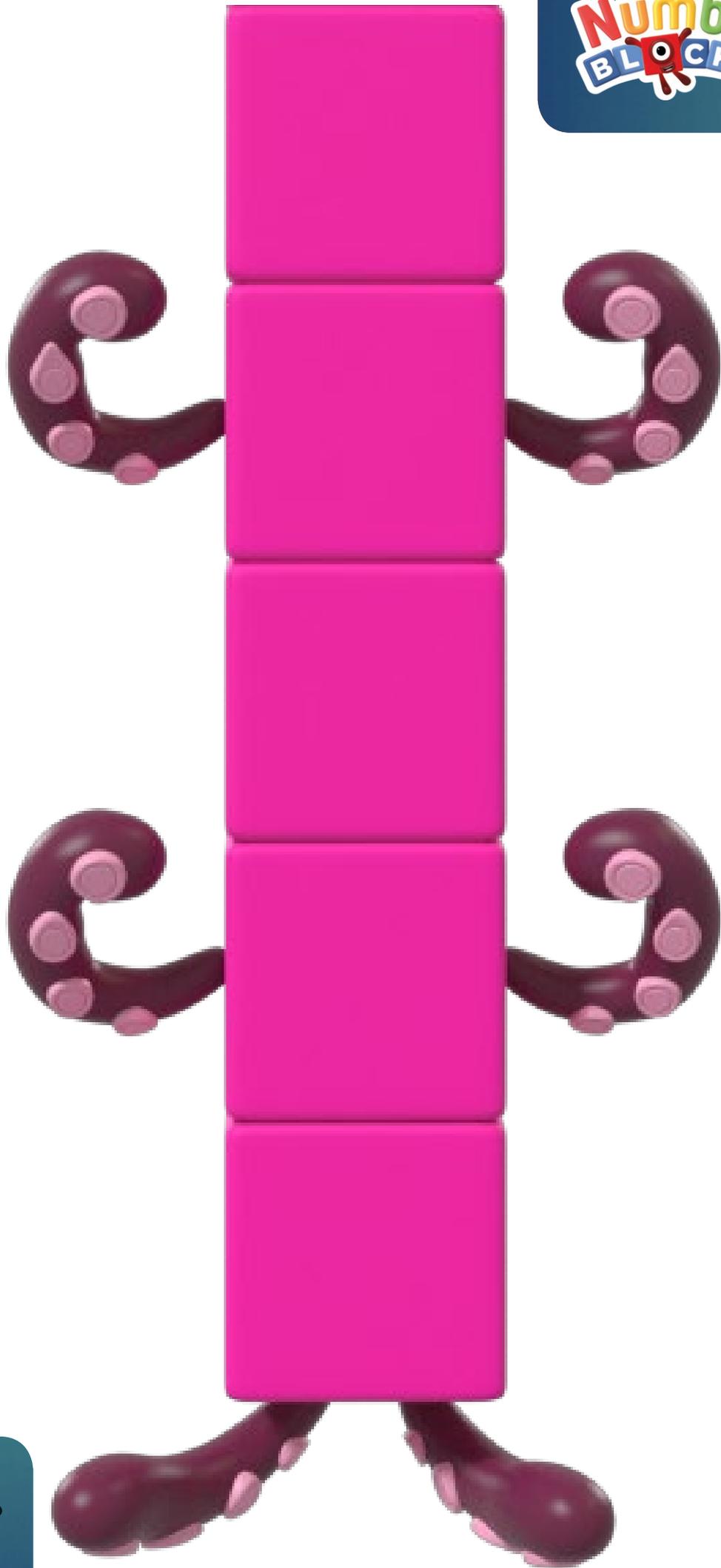


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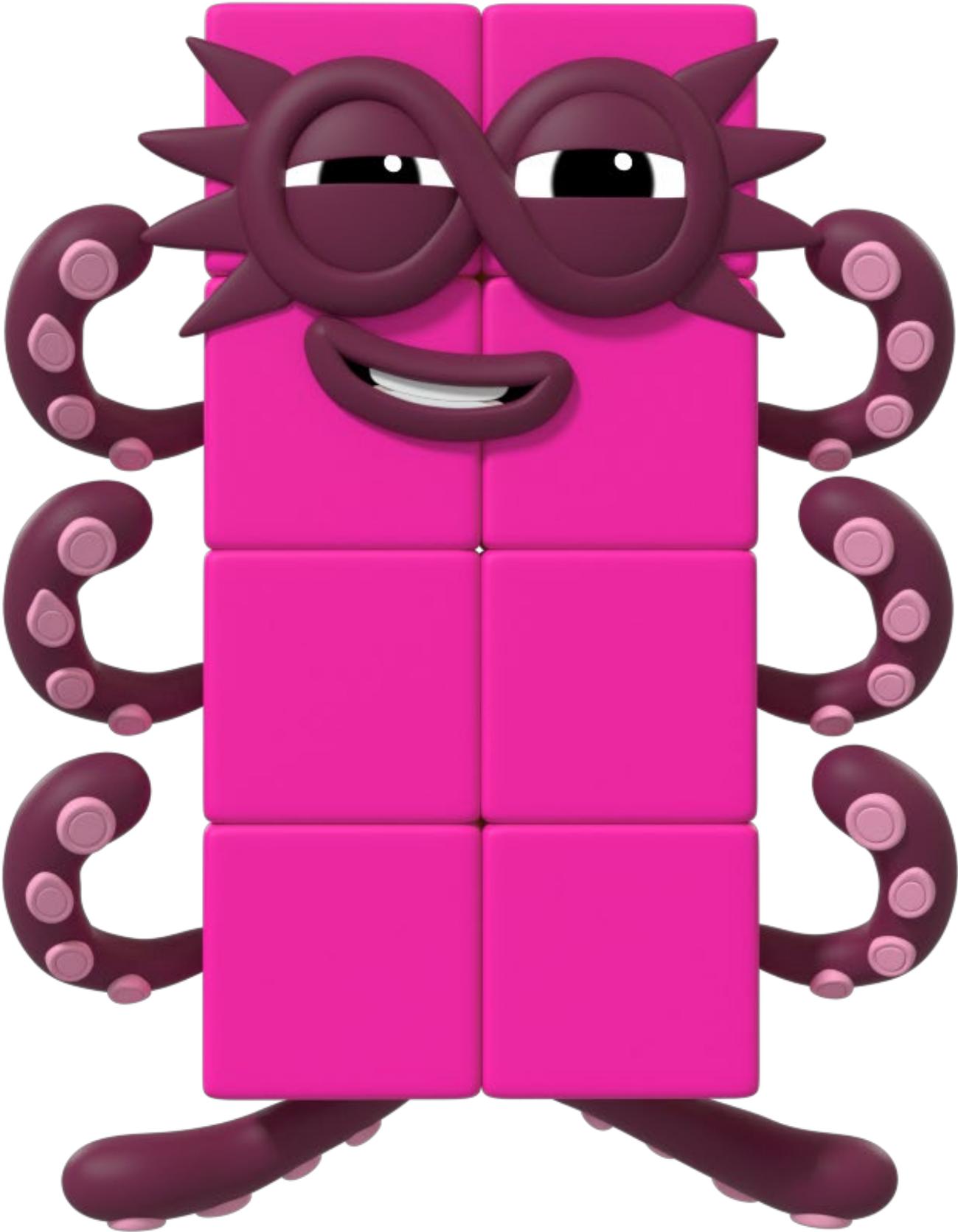


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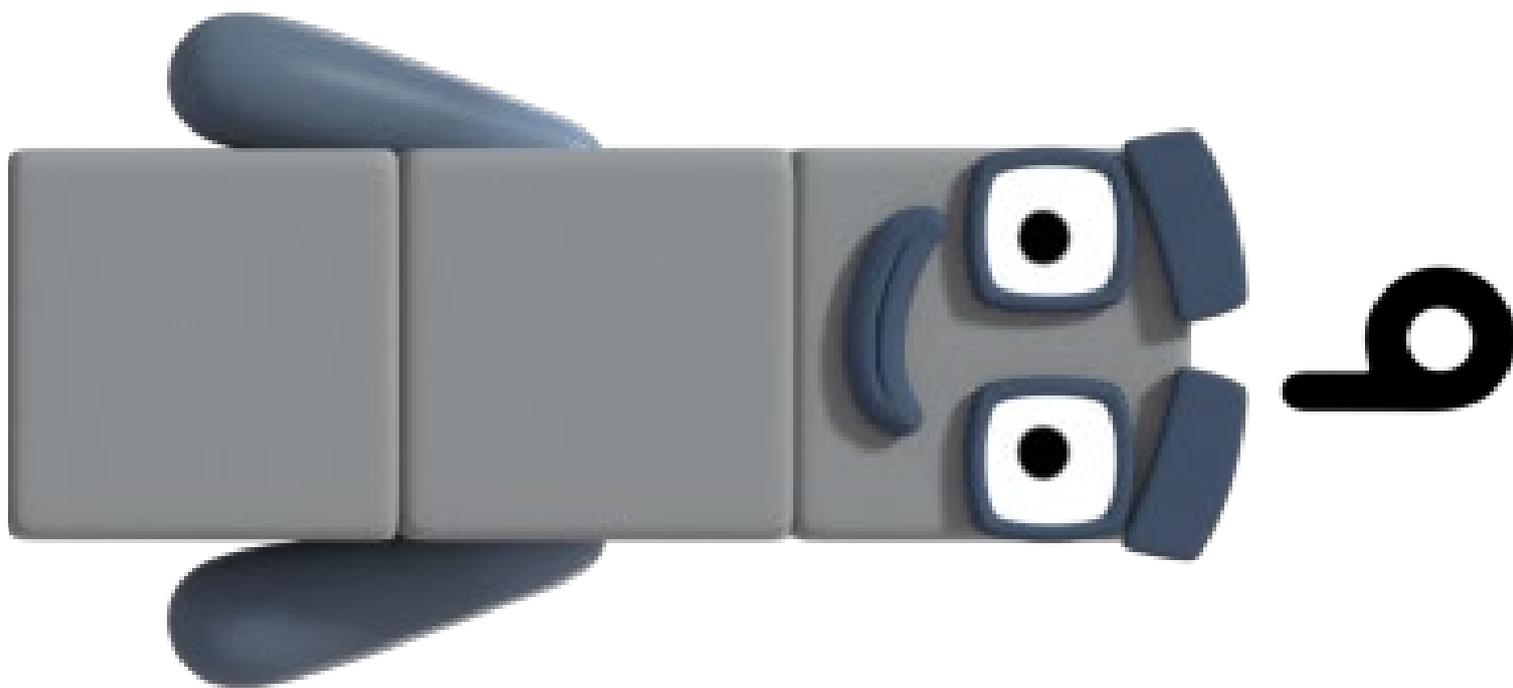




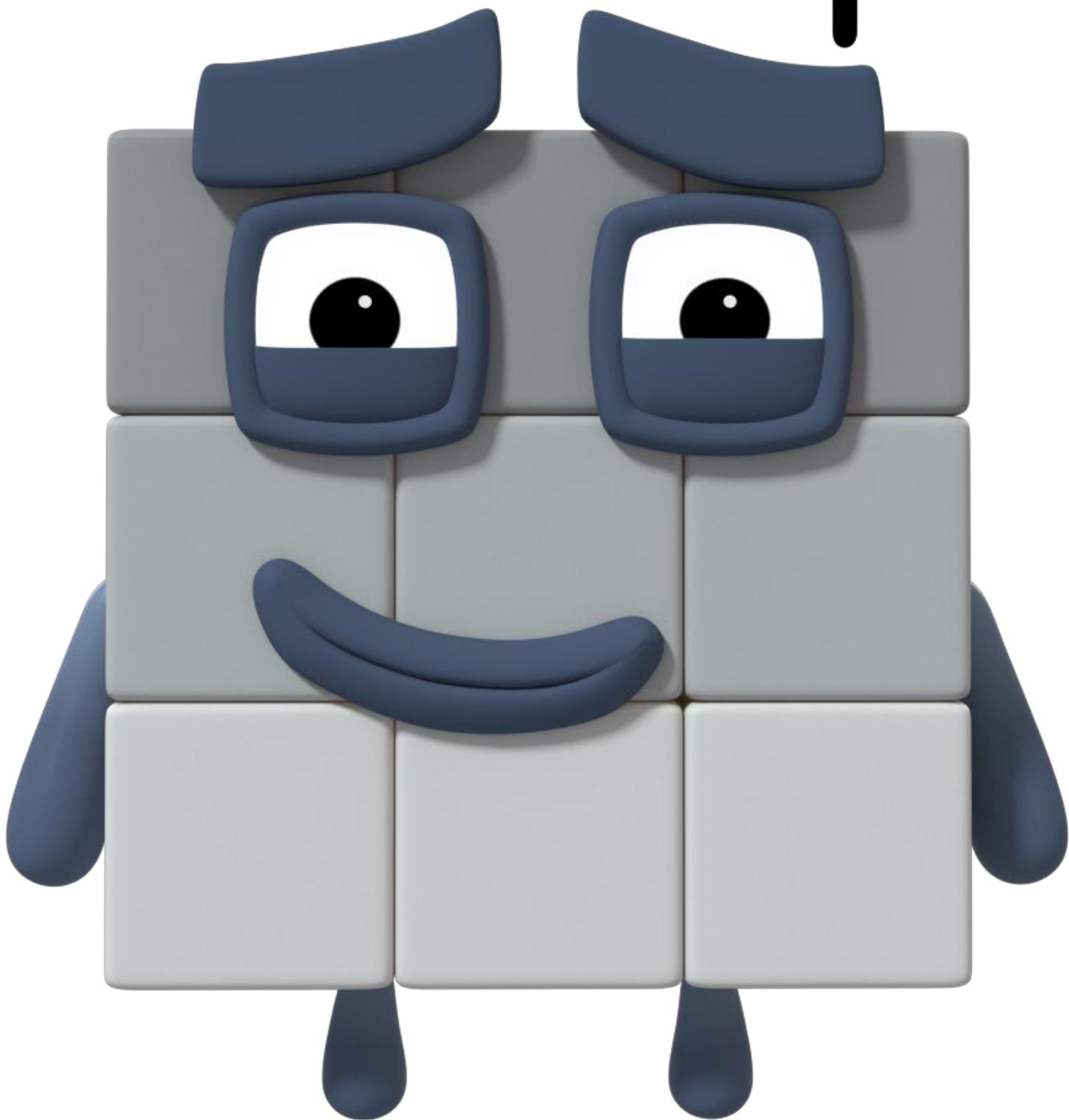
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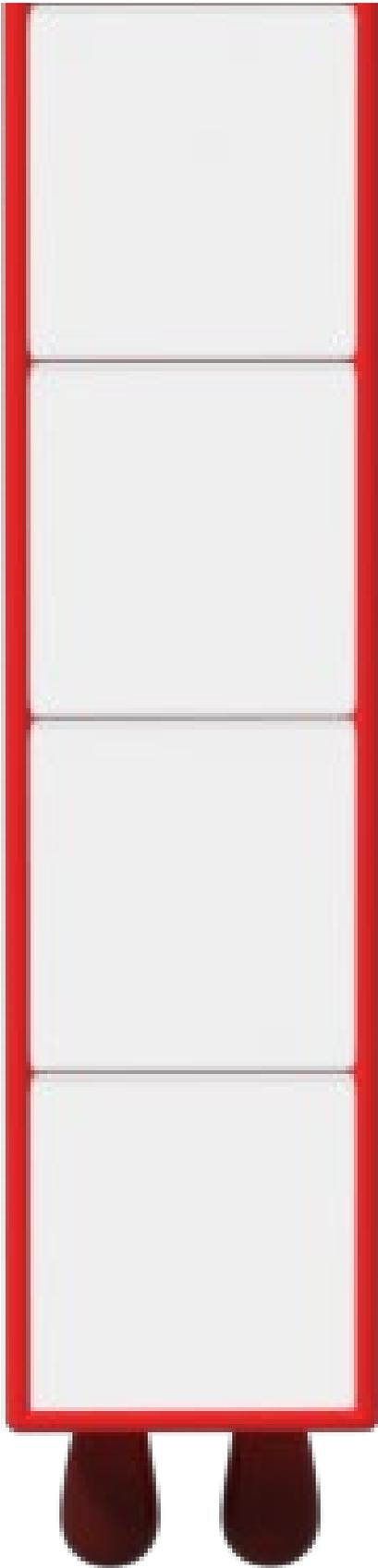


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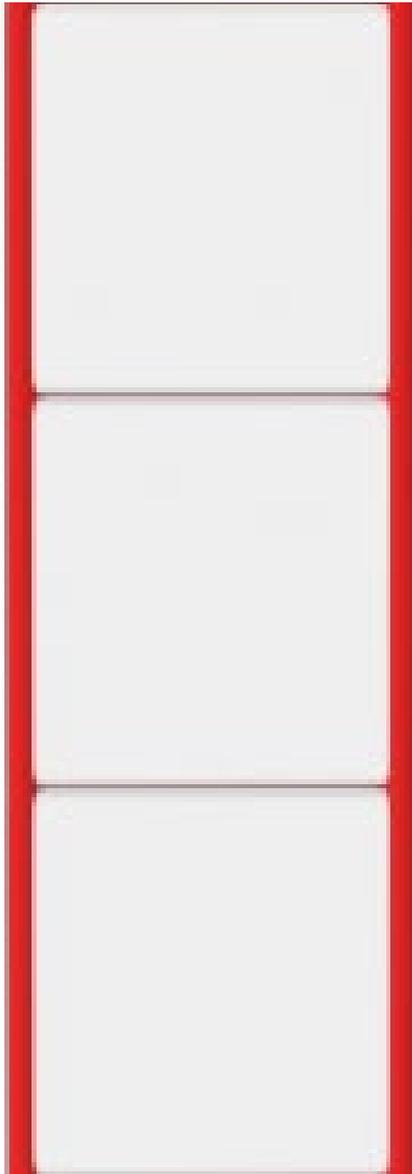
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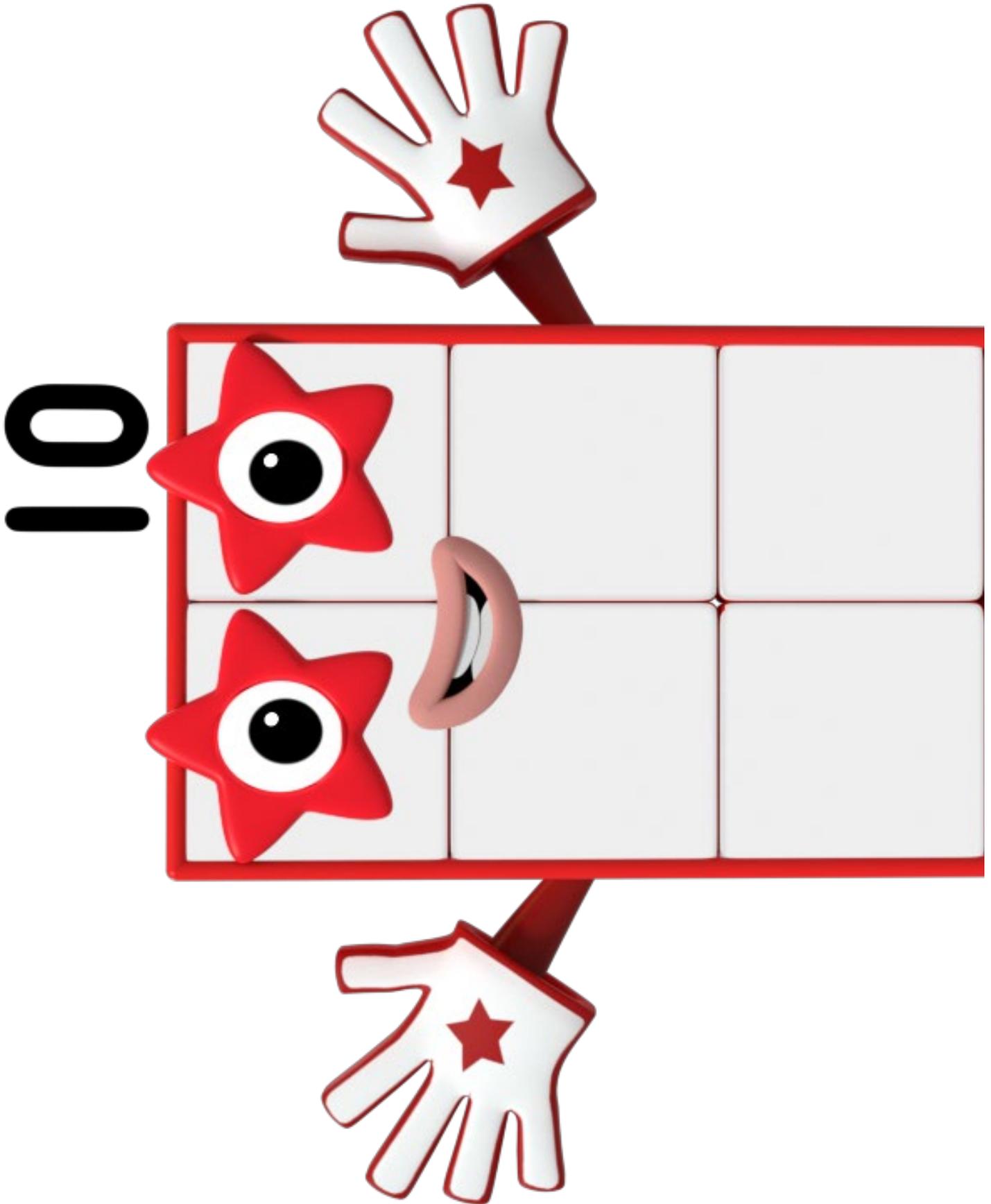


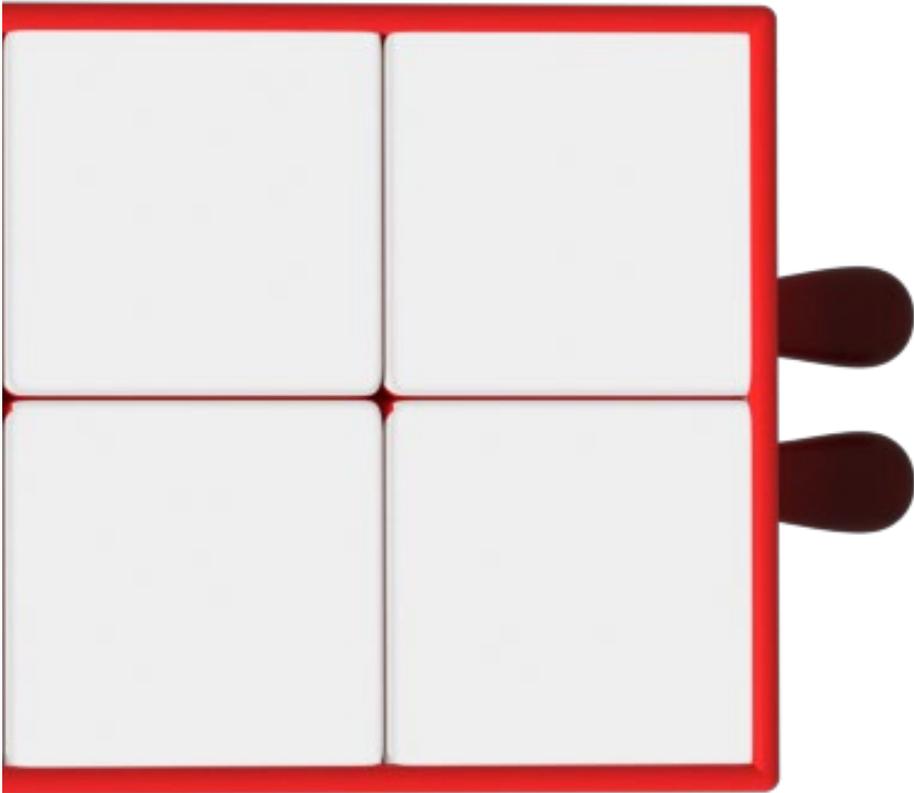
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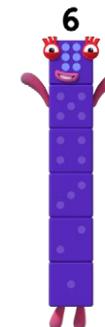




Numberblocks Story Stones



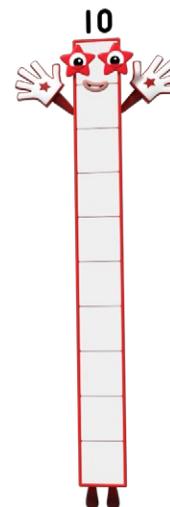
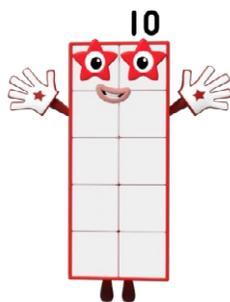
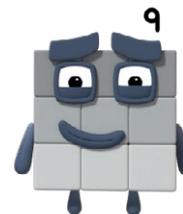
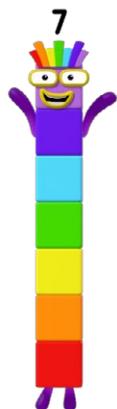
First, print out the images (we recommend using a toner printer). Then, cut them out and stick them onto a pebble or stone using a liquid glue. Start by putting a blob of glue onto the pebble and place the image onto it. Next, gently use your fingers to smooth out any air bubbles. Once dry, finish off by spreading some more glue carefully over the entire pebble to create a good seal.

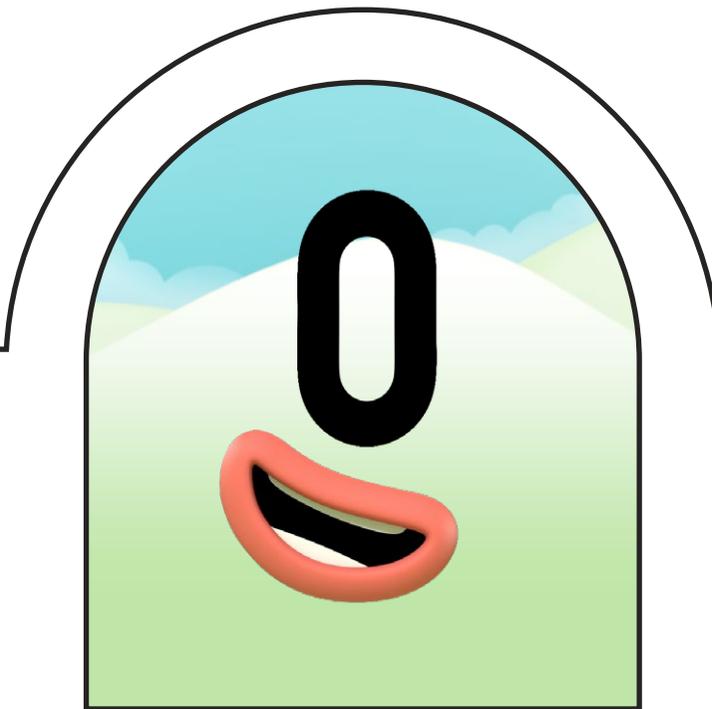


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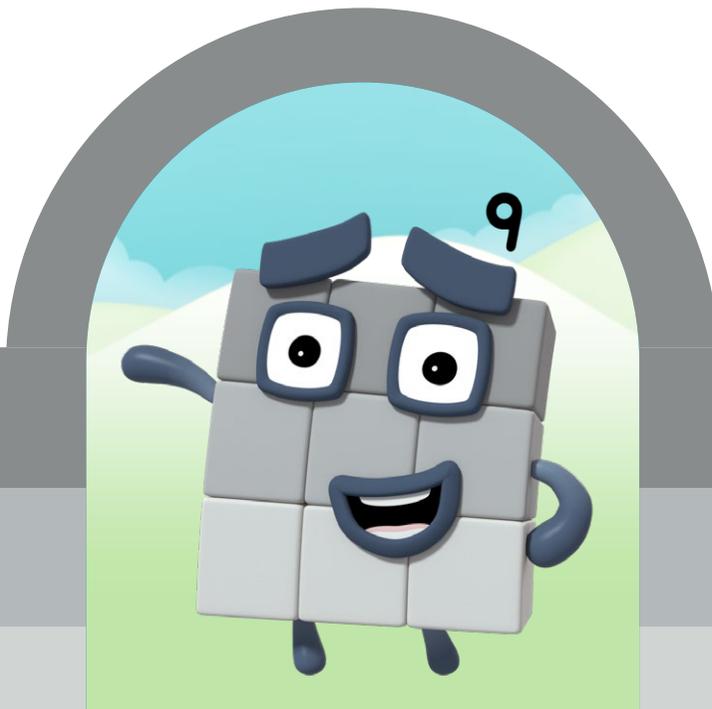
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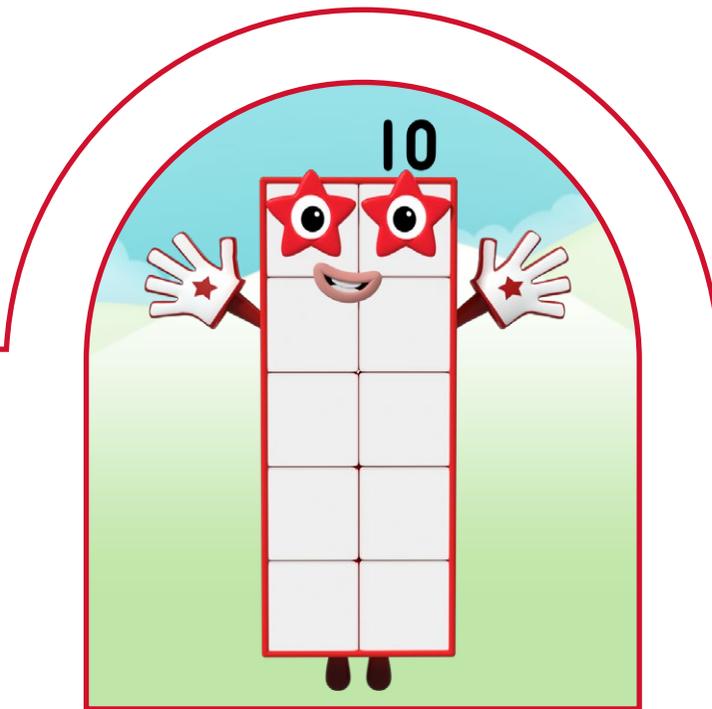
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