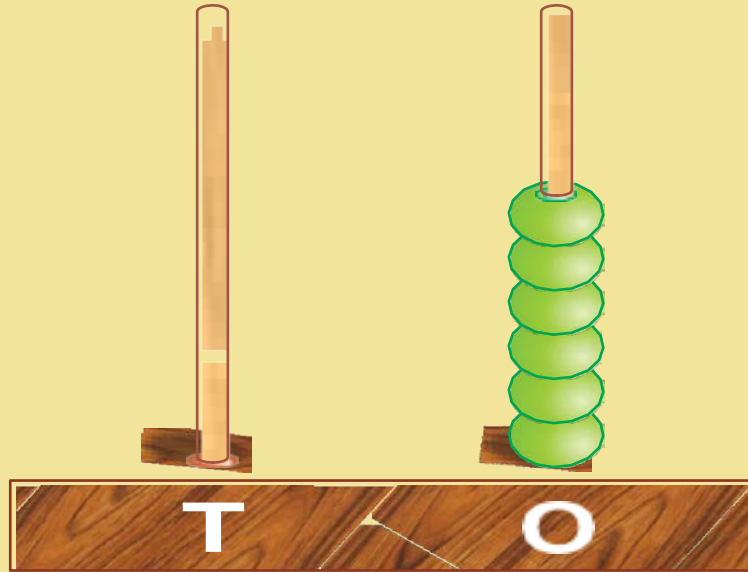


CLASS – 2
MATHEMATICS

Number Upto One Thousand



REPRESENTING NUMBERS ON THE ABACUS

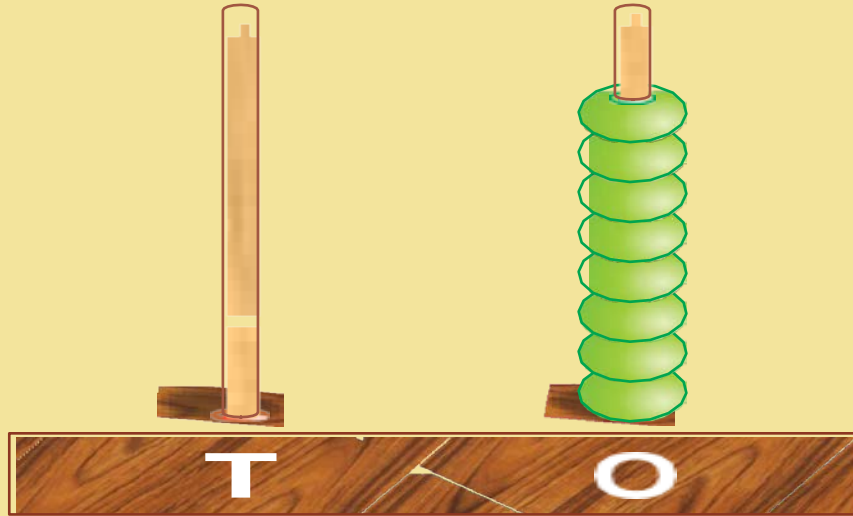


6 ONE 6





REPRESENTING NUMBERS ON THE ABACUS

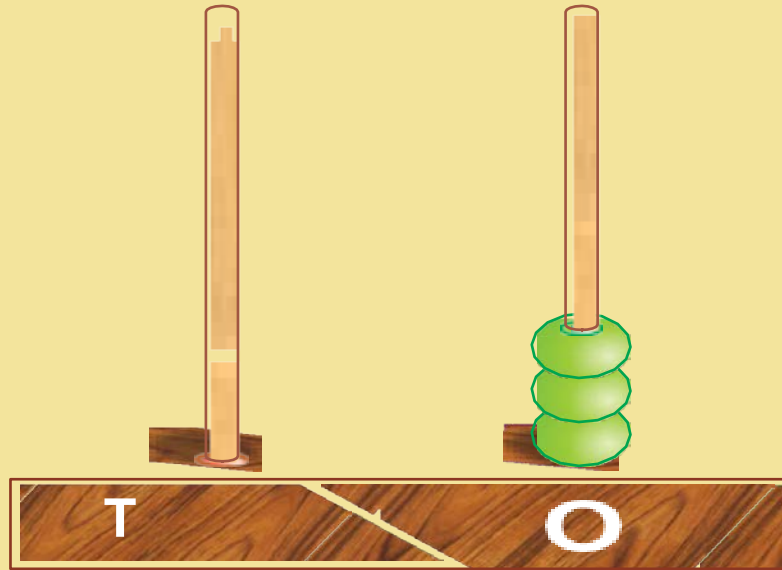


8 ONE 8





REPRESENTING NUMBERS ON THE ABACUS

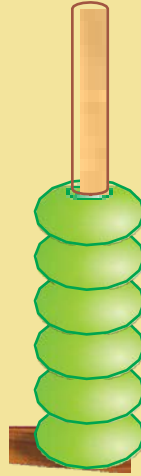


3 ONE 3





T



O

1 ten, 6 ONE = 16

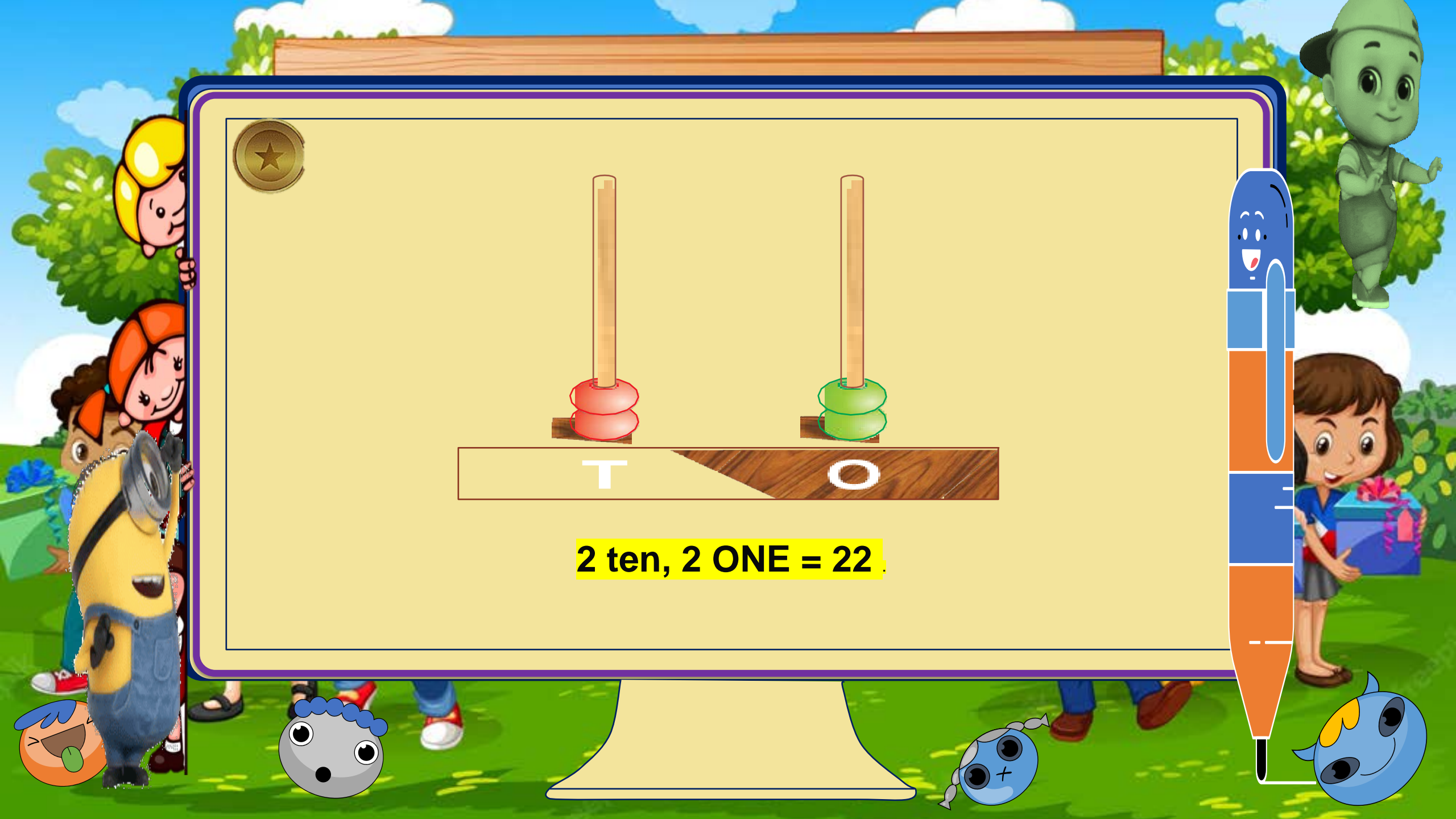


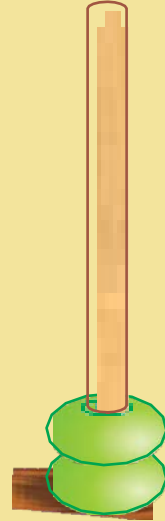
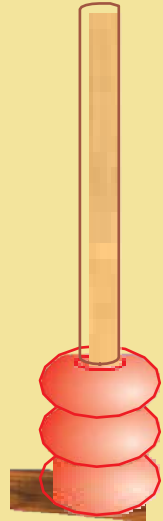


T

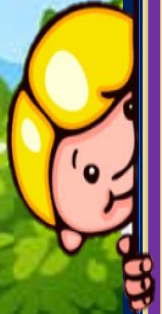
O

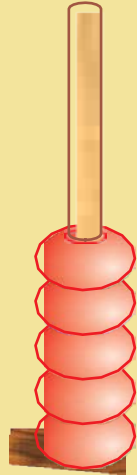
2 ten, 2 ONE = 22 .





3 ten, 2 ONE = 32

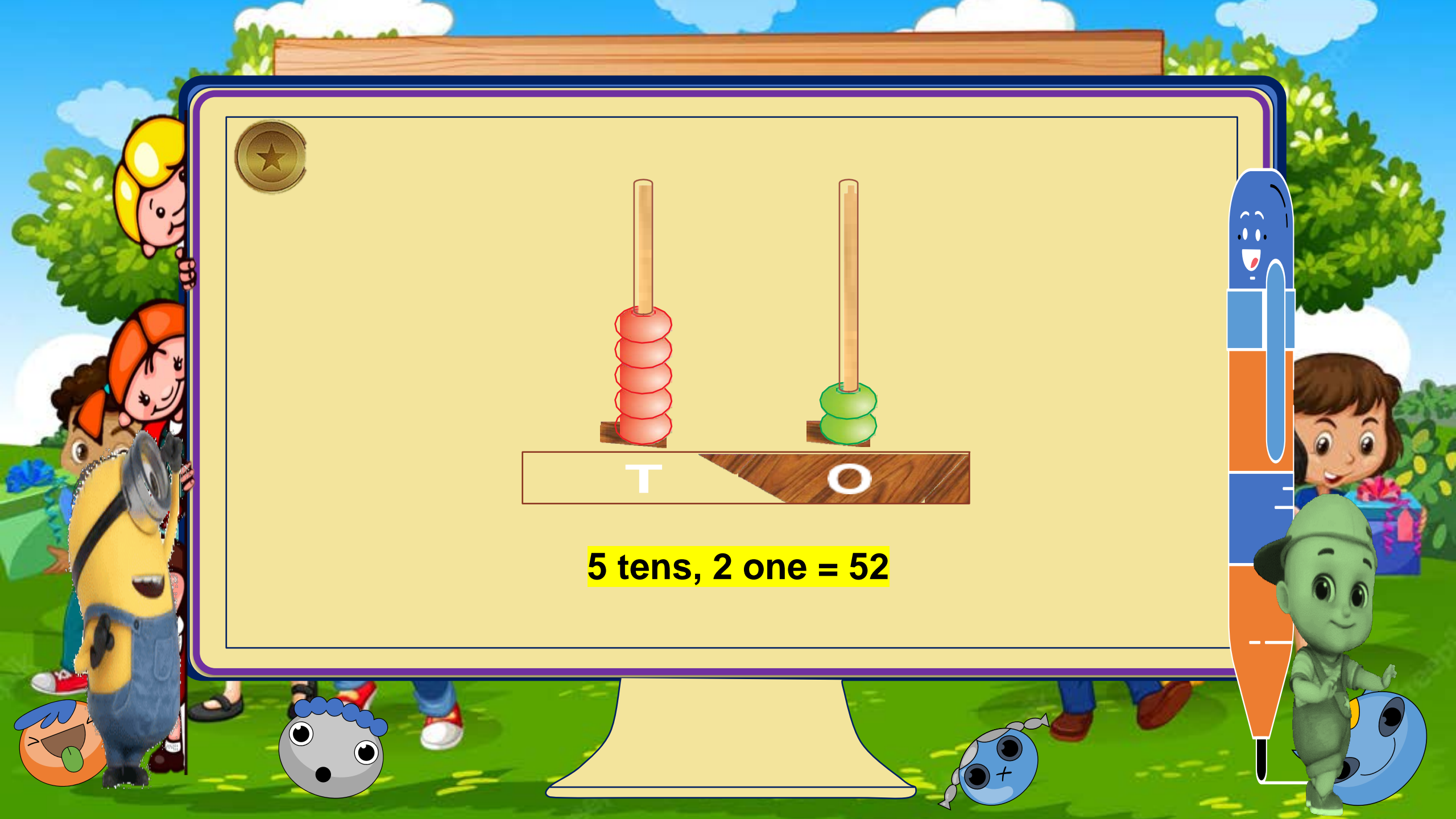




T

O

5 tens, 2 one = 52



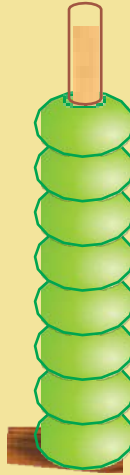
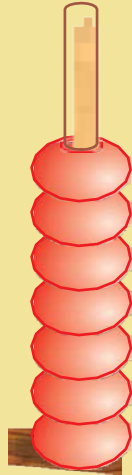


T

O

5 tens, 0 one = 50

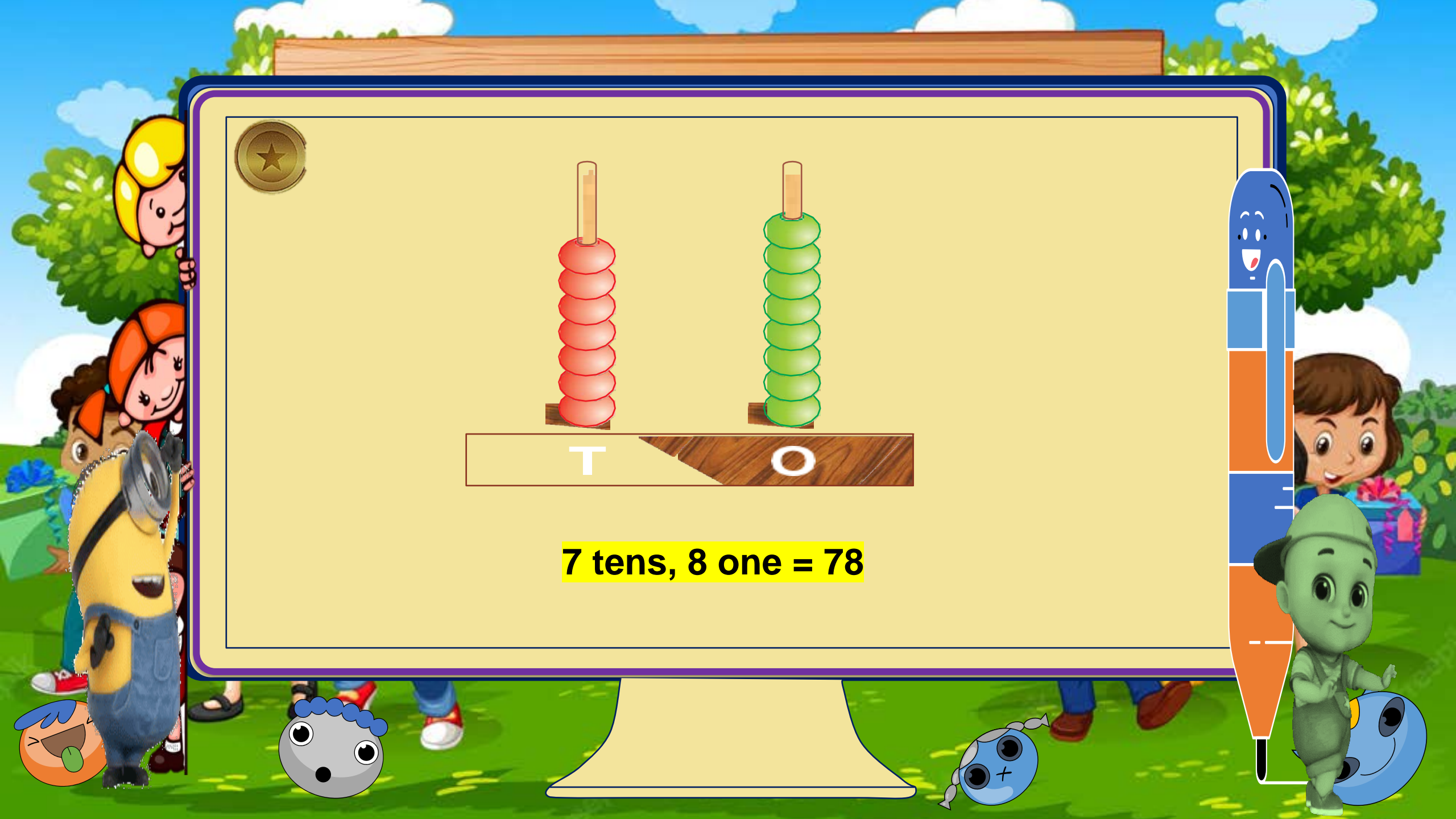


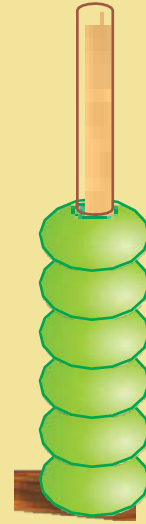
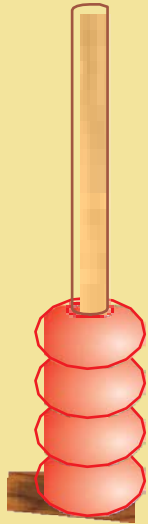


T

O

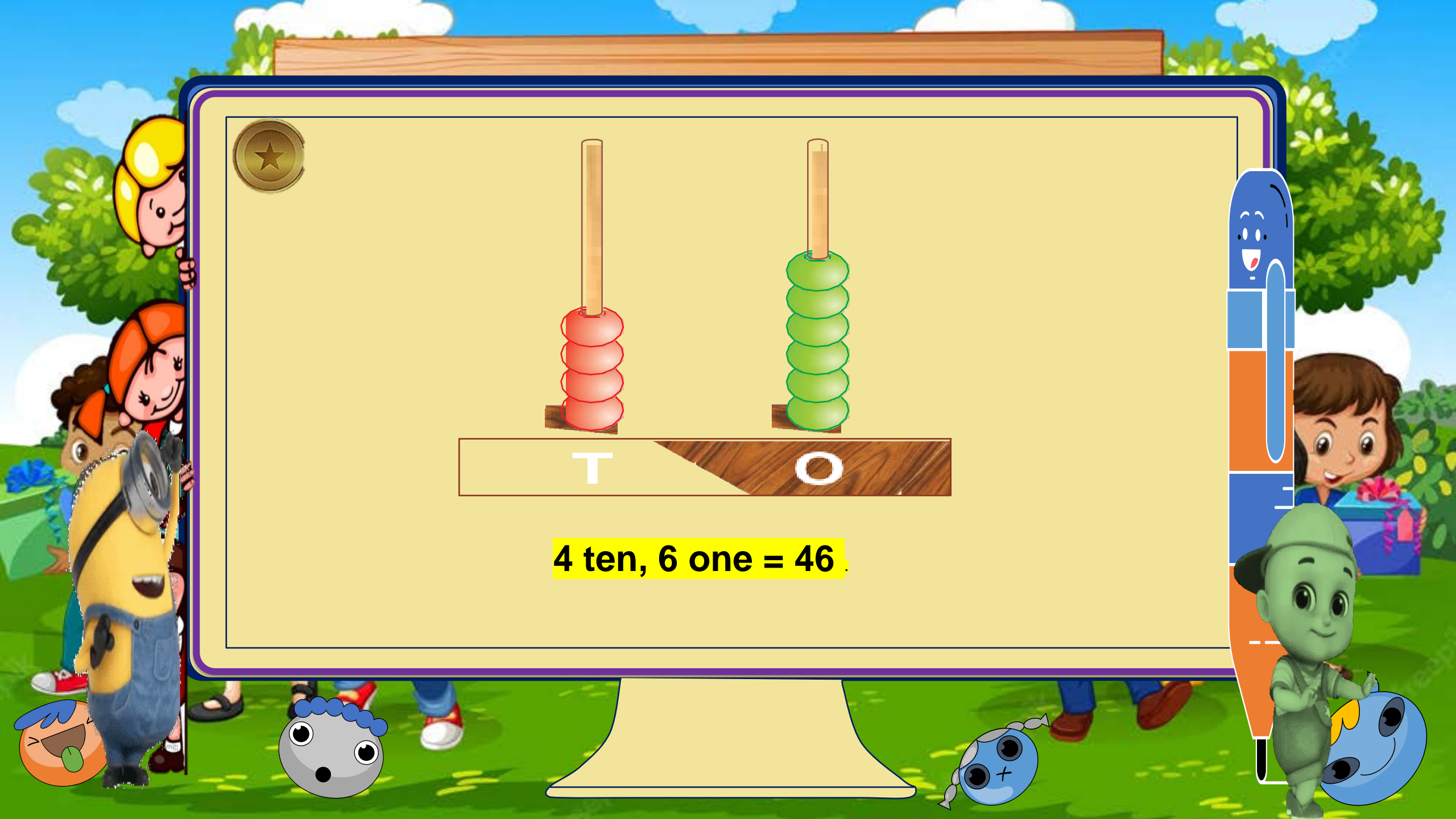
7 tens, 8 one = 78

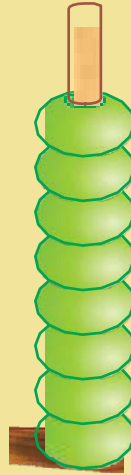
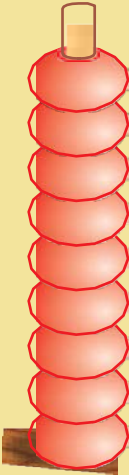




T O

$$4 \text{ ten, } 6 \text{ one} = 46$$

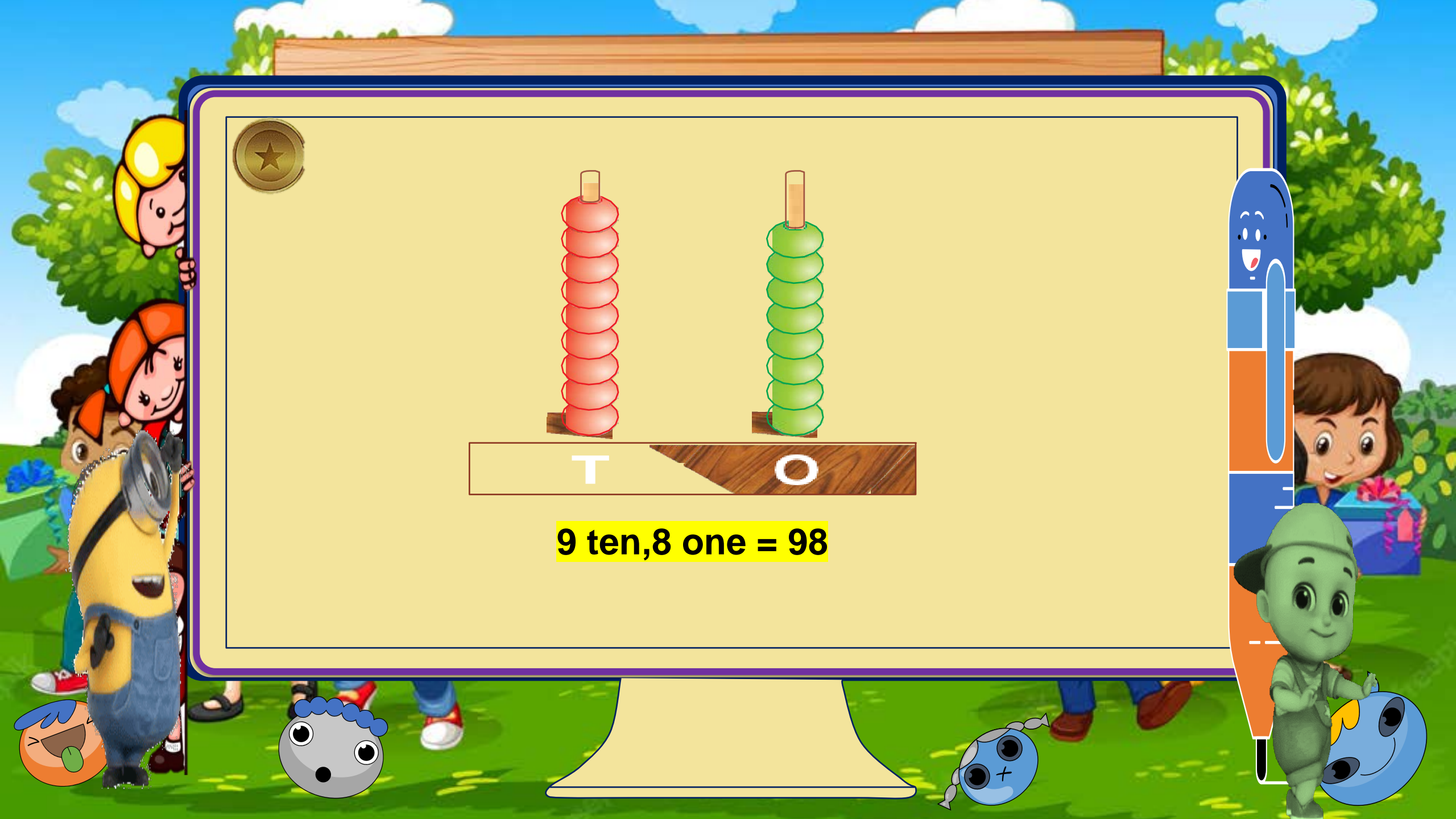


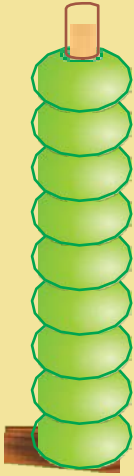
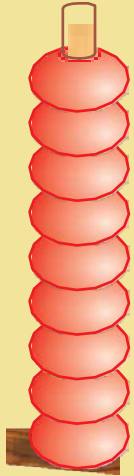


T

O

9 ten, 8 one = 98



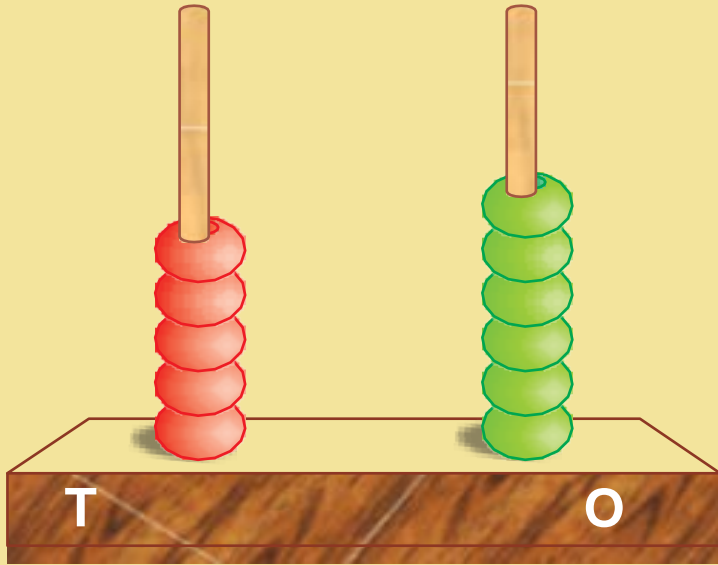


T

O

9 ten, 9 one = 99





$$\boxed{5} \text{ Ten and } \boxed{6} \text{ One} = \boxed{56}$$



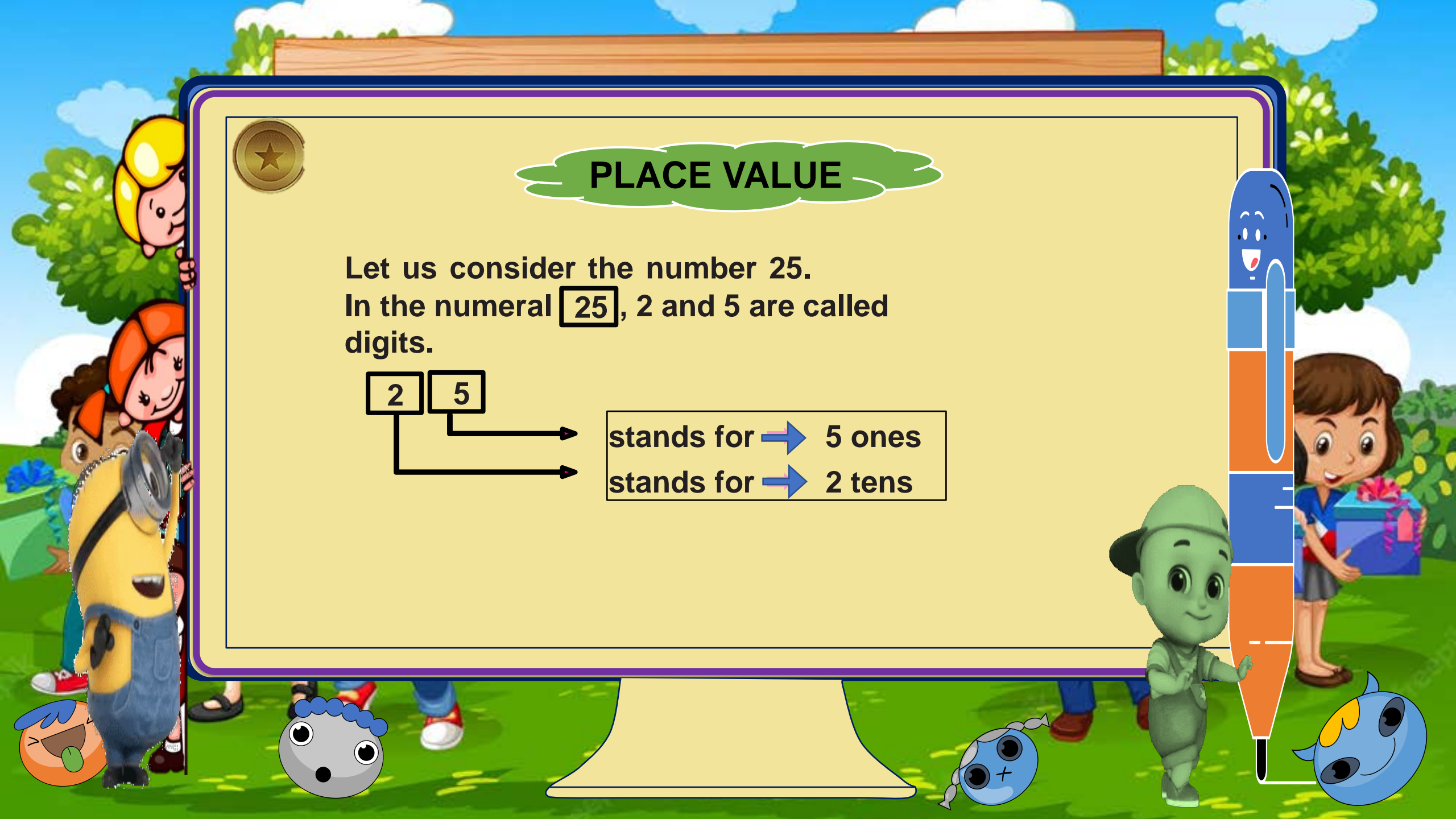


PLACE VALUE

Let us consider the number 25.
In the numeral **25**, 2 and 5 are called
digits.

2 **5**

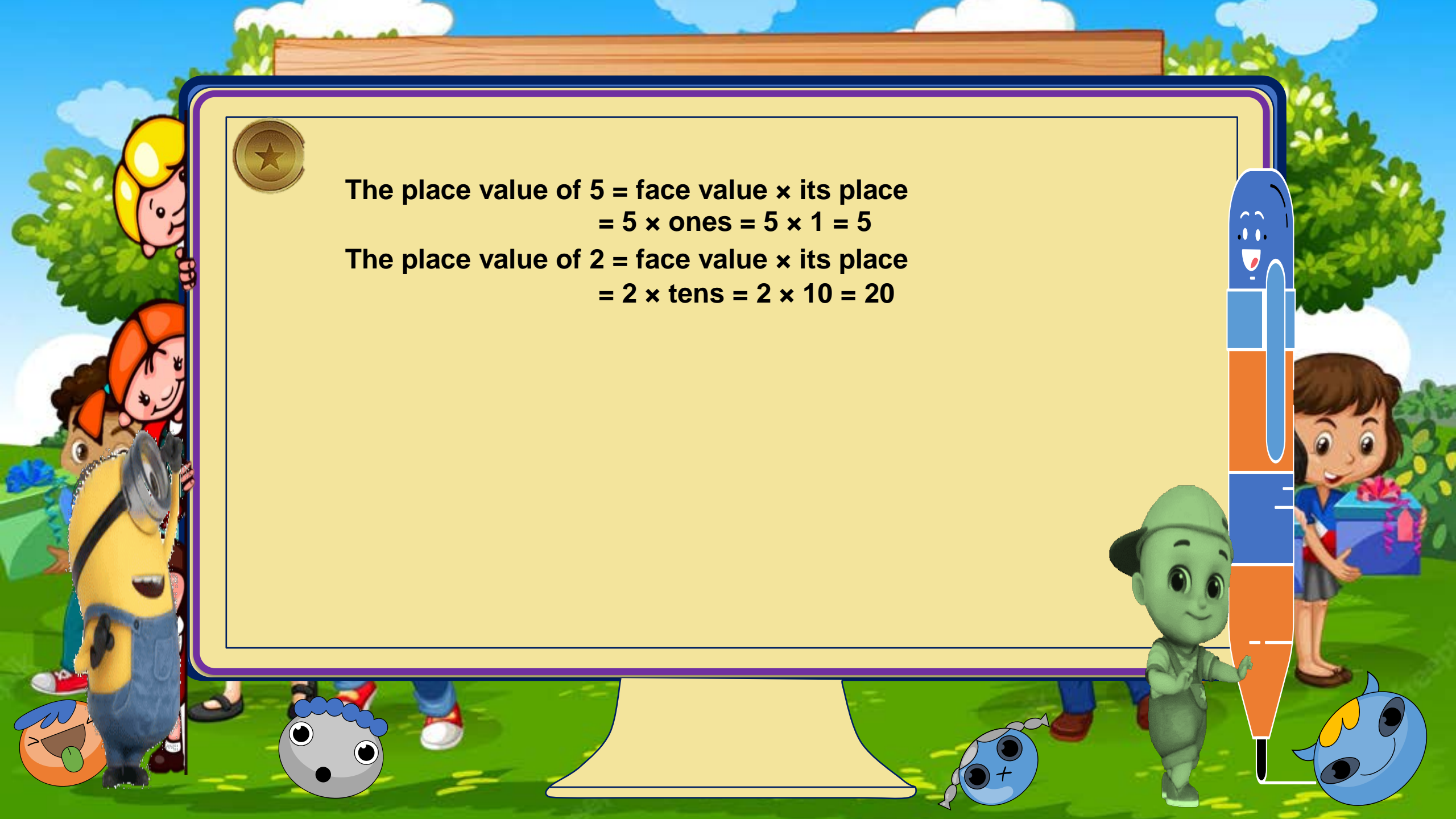
stands for → 5 ones
stands for → 2 tens





The place value of 5 = face value \times its place
= 5 \times ones = 5 \times 1 = 5

The place value of 2 = face value \times its place
= 2 \times tens = 2 \times 10 = 20





REPRESENTING 1 - DIGIT NUMBERS:

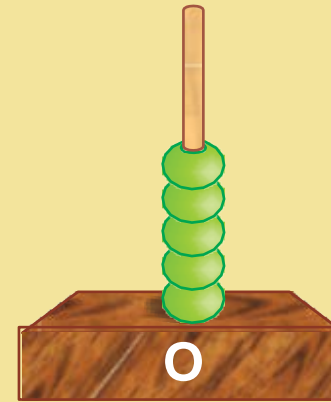
Consider the number 5.

In the numeral $\boxed{5}$, 5 is called a digit.

$\boxed{5}$



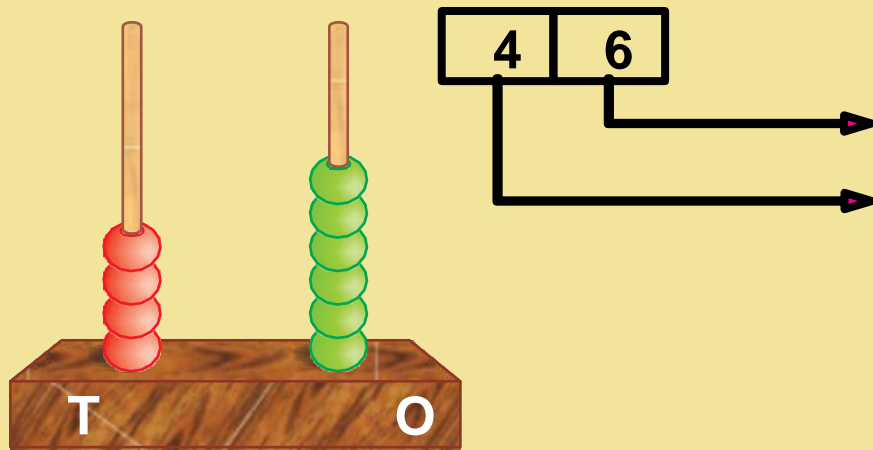
stands for \rightarrow 5 ones





REPRESENTING 2-DIGIT NUMBERS:

Consider the number 46



stands for \Rightarrow 6 ones

stands for \Rightarrow 4 tens

$46 = 4 \text{ tens and } 6 \text{ ones}$

$= 4 \text{ tens} + 6 \text{ ones}$

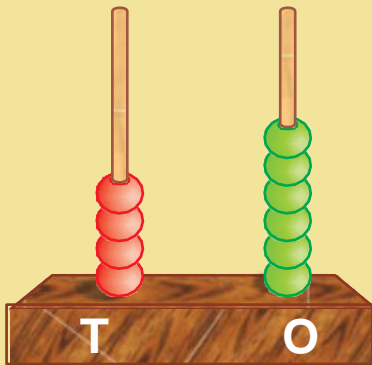
$= 4 \times 10 + 6 \times 1$

$= 40 + 6 = 46$

Expanded Form

In the numeral 46,

4 **6**



46 can be written as

4 tens + **6** ones or **40** + **6**

To express a number as a sum of place values of its digits is called **expanded form**

Place-Value Chart

Read the following place-value chart :

	Place-value Chart	
	Tens (T)	Ones (O)
64 →	6	4
78 →	7	8
92 →	9	2

ONE HUNDRED

How many ones are there in 1 ten ?



are same as



10 ones

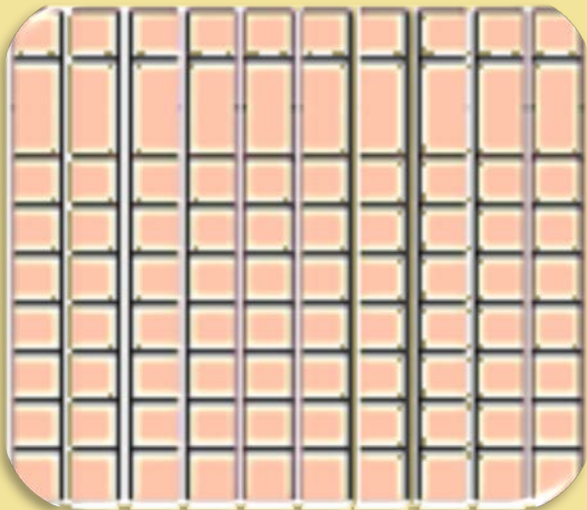
are same as

1 ten

Hence, there are 10 ones in 1 ten.

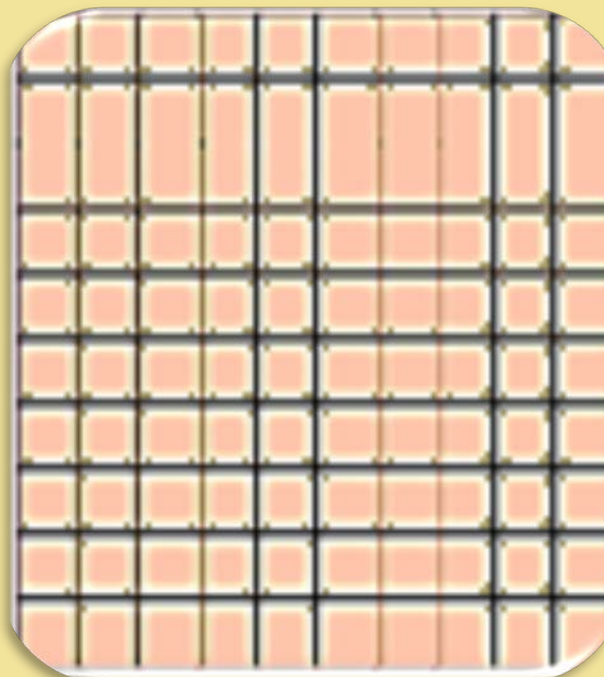
$$10 \text{ ones} = 1 \text{ ten}$$

How many tens are there in 1 hundred ?



10 tens

are same as



1 hundred

Hence, there are 10 tens in 1 hundred.

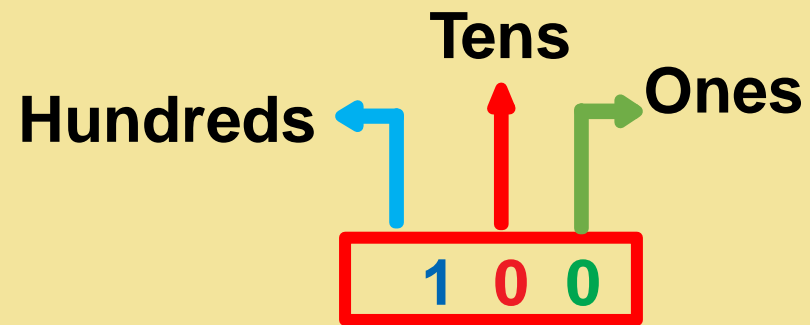


1 hundred

100

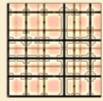


10 tens = 1 hundred



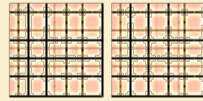
The smallest 3-digit number is 100.

Counting of Hundreds



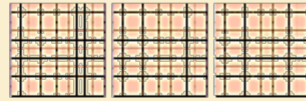
One hundred

1 0 0



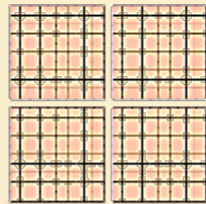
Two hundred

2 0 0



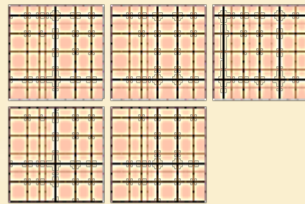
Three hundred

3 0 0



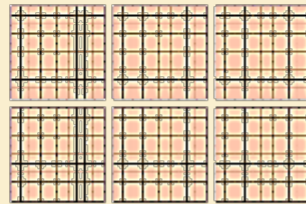
Four hundred

4 0 0



Five hundred

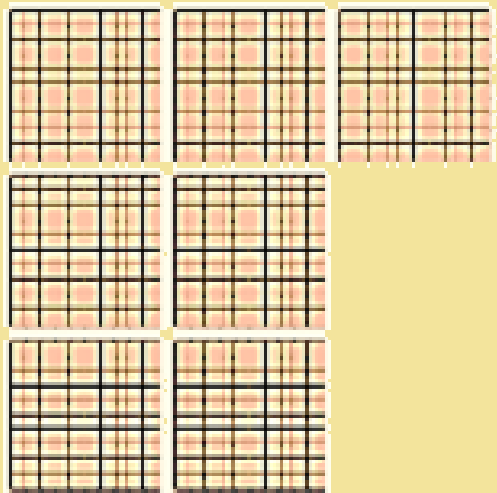
5 0 0



Six hundred

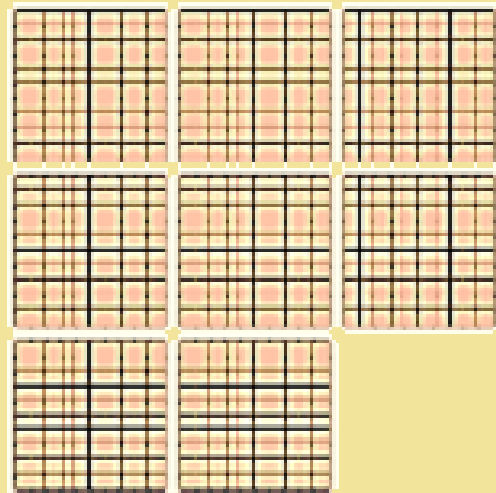
6 0 0





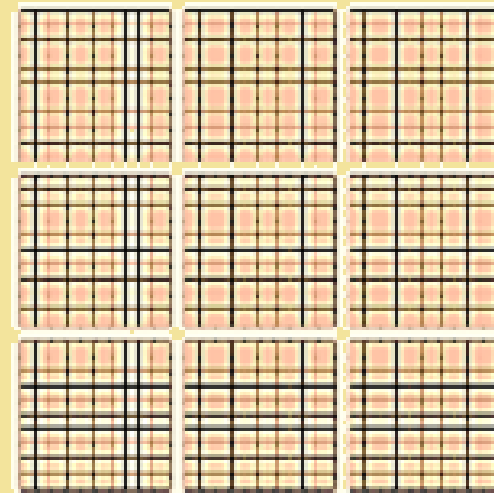
Seven hundred

7	0	0
---	---	---



Eight hundred

8	0	0
---	---	---



Nine hundred

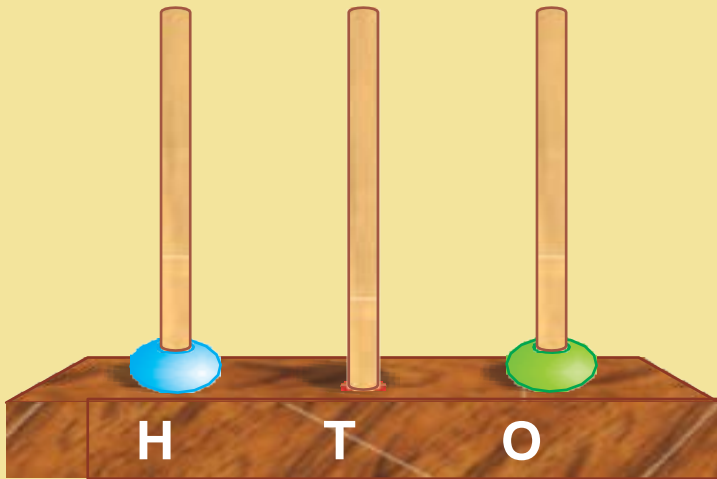
9	0	0
---	---	---

Now, count the hundreds on number line.



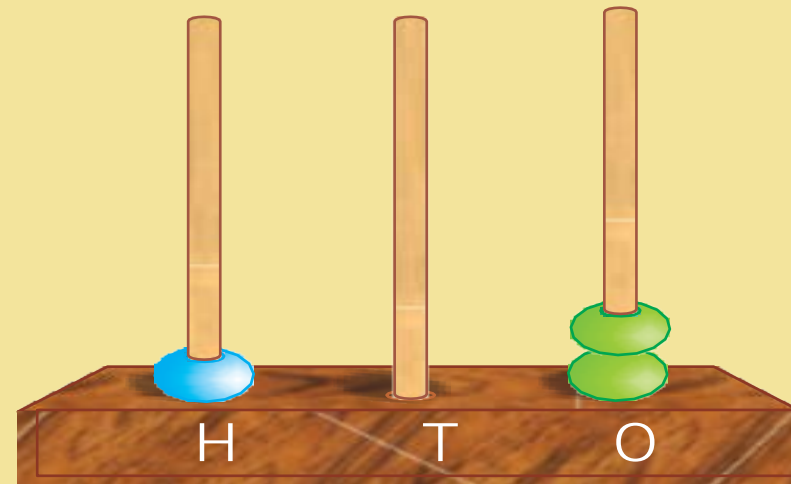


Numbers upto Two Hundreds



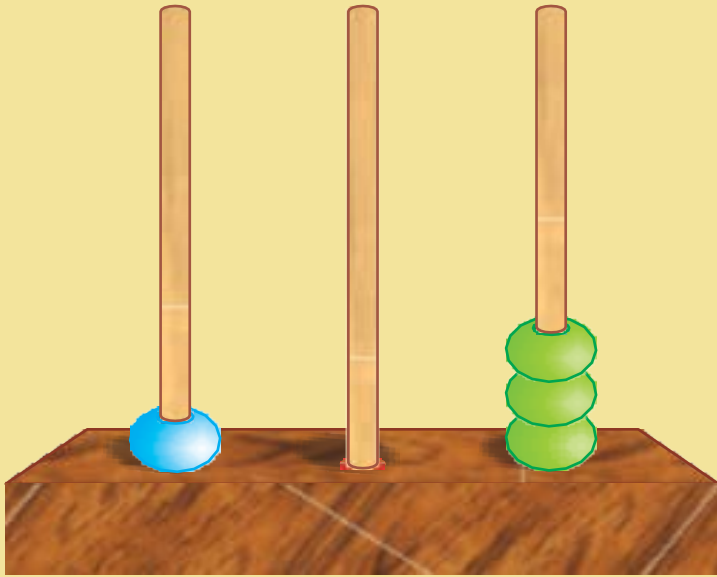
1 hundred, 0 ten and 1
one One hundred one

101



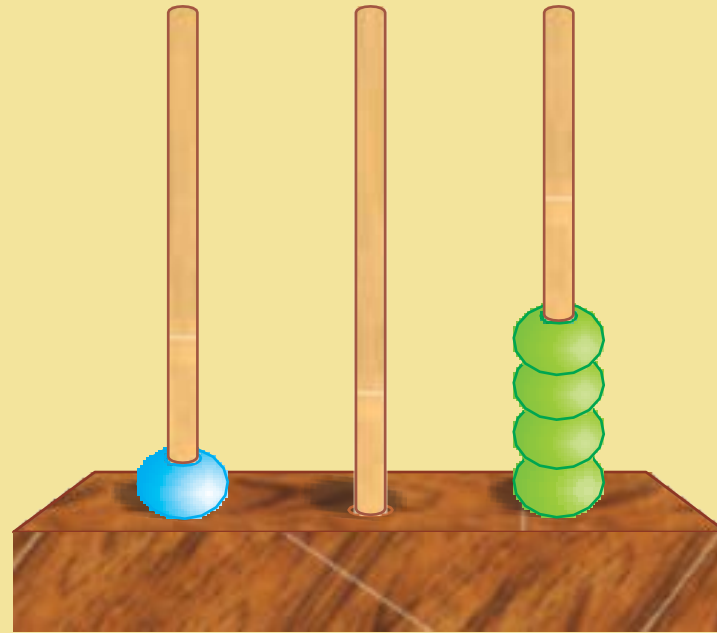
1 hundred, 0 ten, and 2
ones One hundred two

102



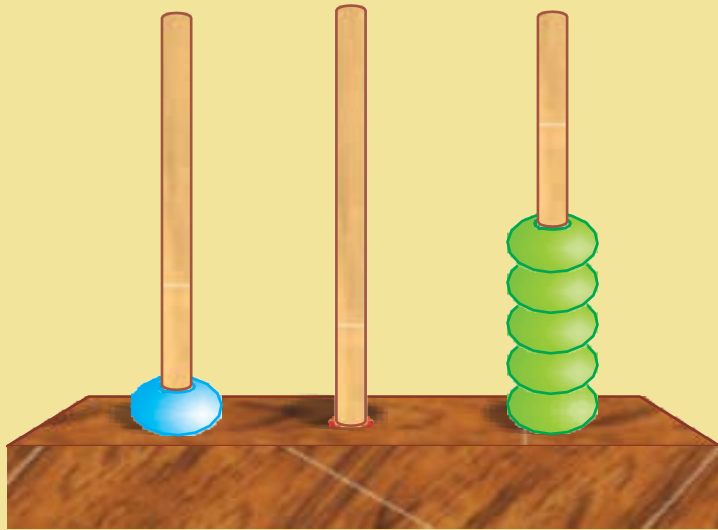
1 hundred, 0 ten and 3
ones One hundred three

103



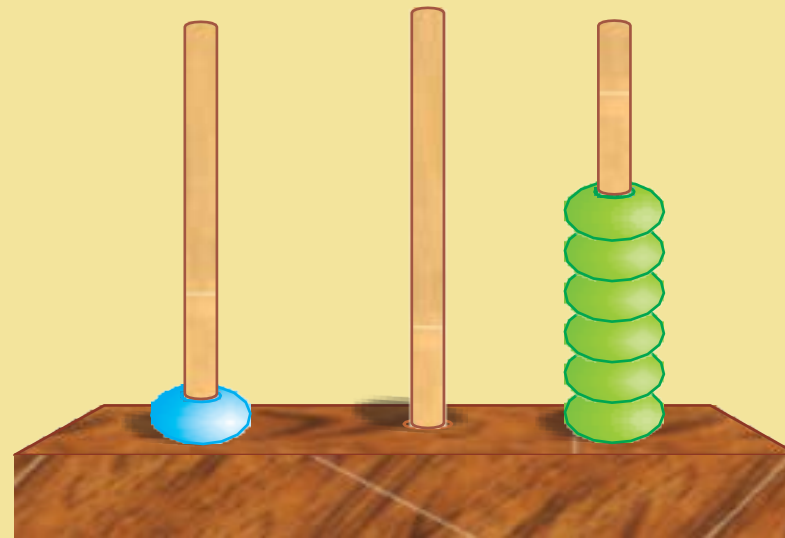
1 hundred, 0 ten, and 4
ones One hundred four

104



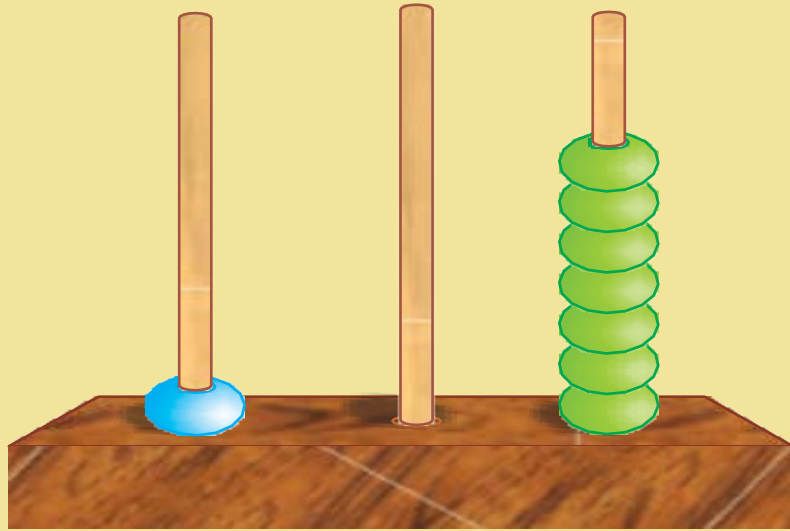
1 hundred, 0 ten and 5
one One hundred five

105



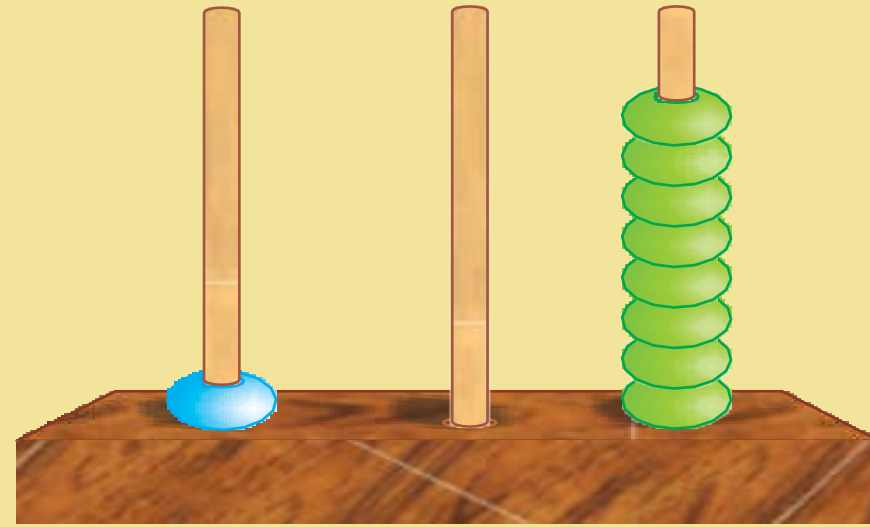
1 hundred, 0 ten, and 6
ones One hundred six

106



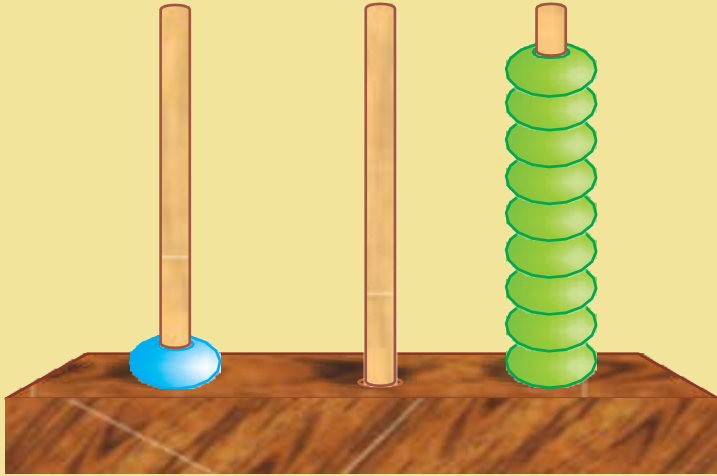
1 hundred, 0 ten and 7
one One hundred Seven

107



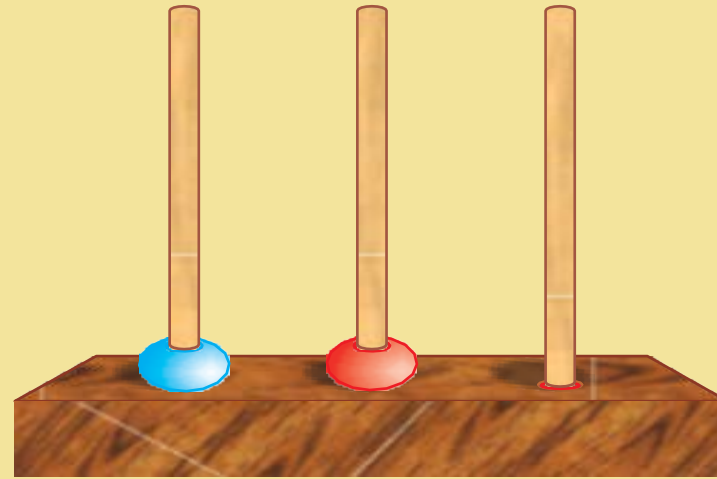
1 hundred, 0 ten, and 8
ones One hundred eight

108



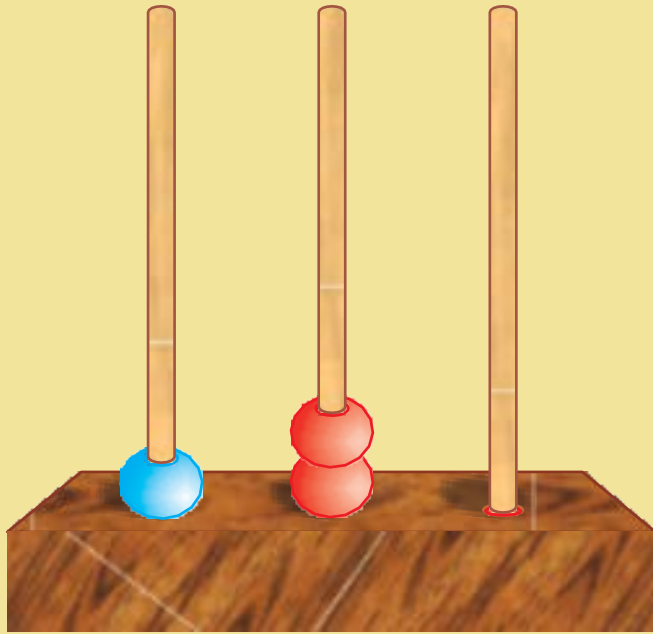
1 hundred, 0 ten and 9
one One hundred nine

109



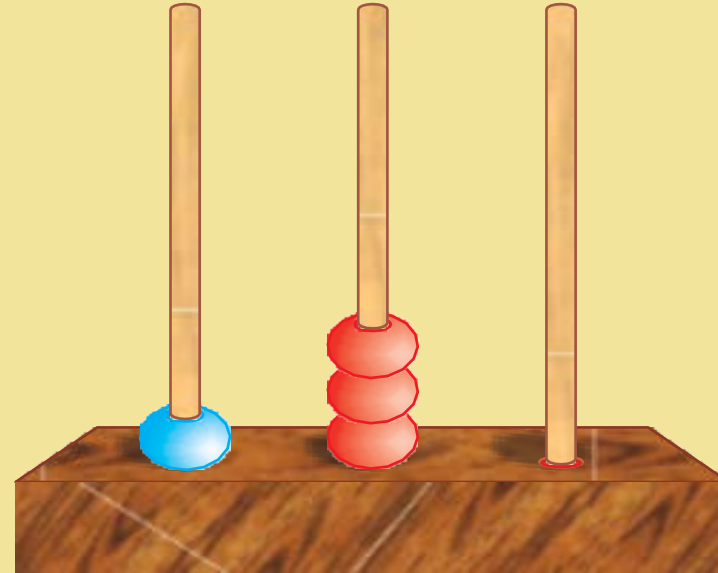
1 hundred, 1 ten, and 0
ones One hundred ten

110



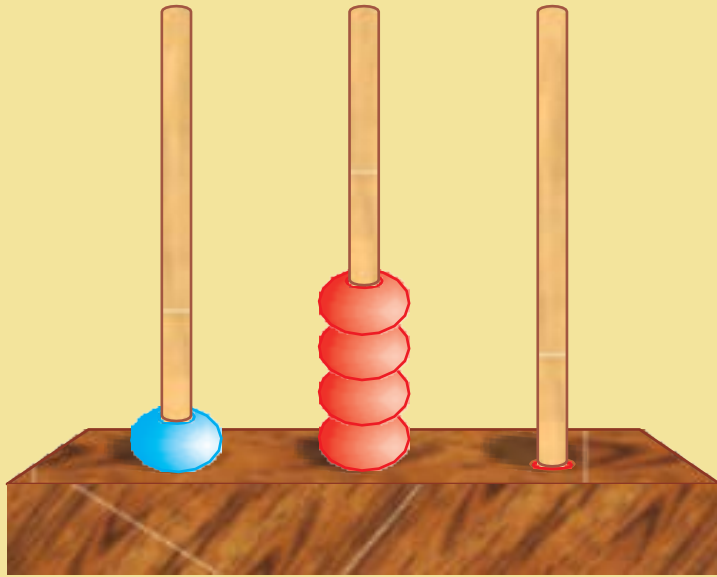
1 hundred, 2 ten and 0
one One hundred twenty

120



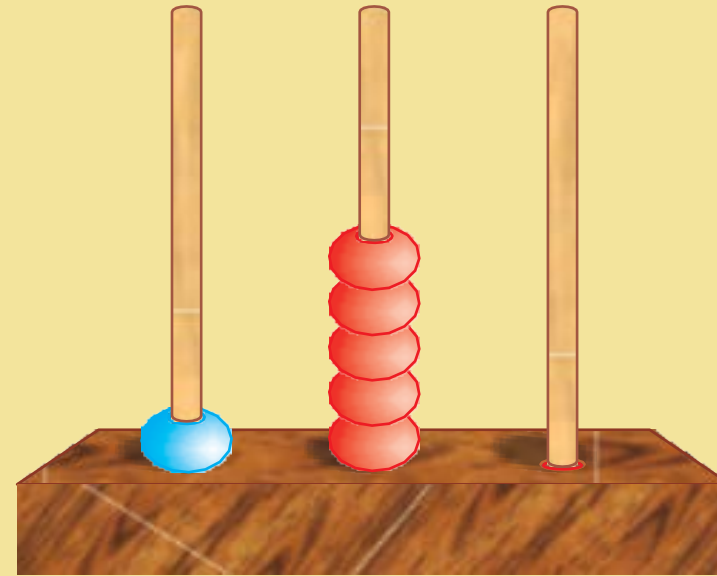
1 hundred, 3 ten, and 0
ones One hundred thirty

130



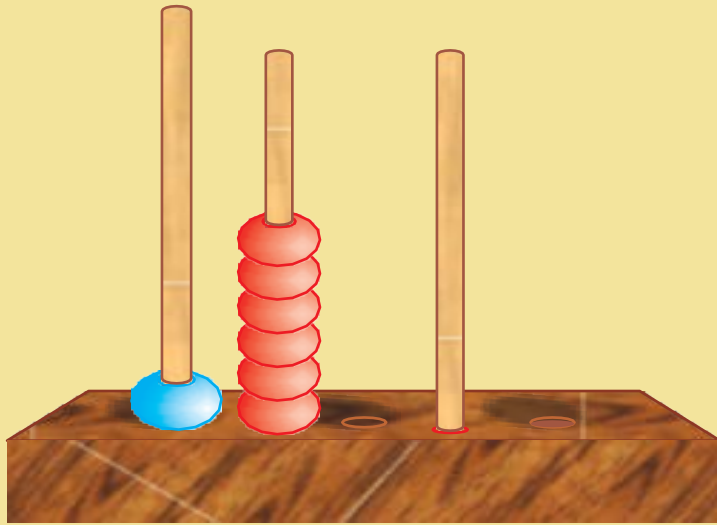
1 hundred, 4 ten and 0
one One hundred forty

140



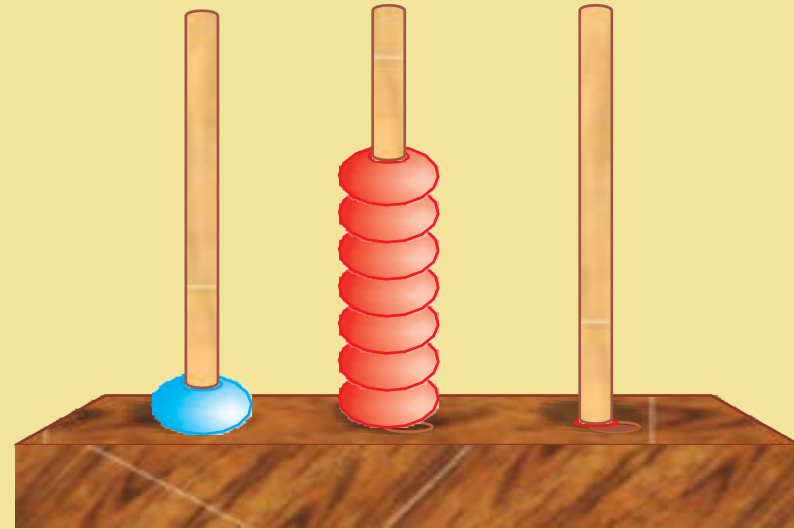
1 hundred, 5 ten, and 0
ones One hundred fifty

150



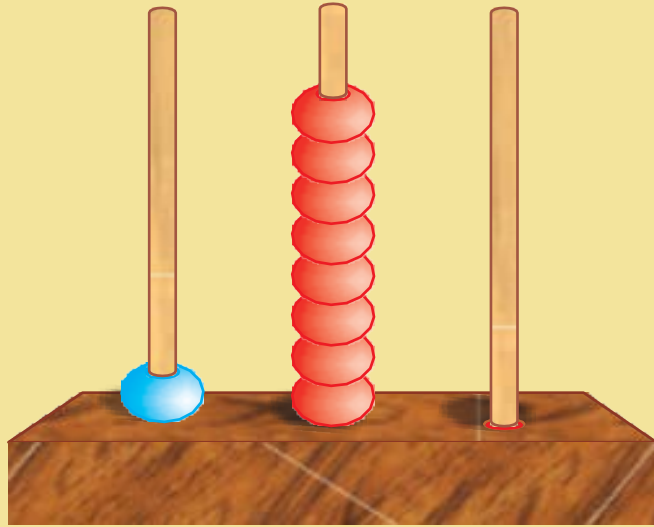
1 hundred, 6 ten and 0
one One hundred Sixty

160



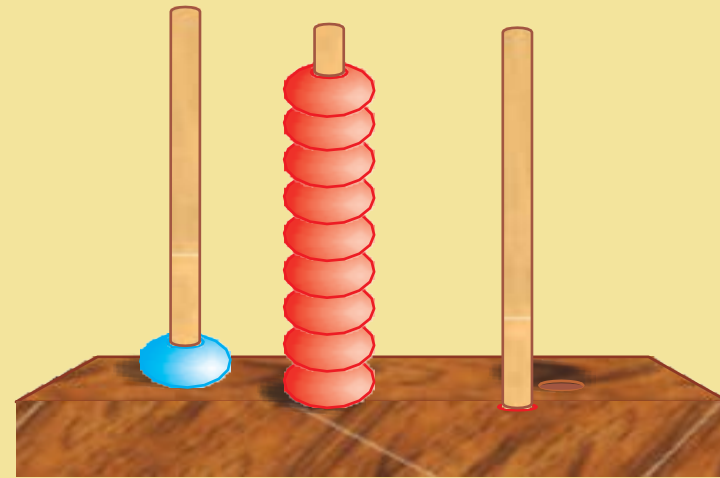
1 hundred, 7 ten, and 0
ones One hundred Seventy

170



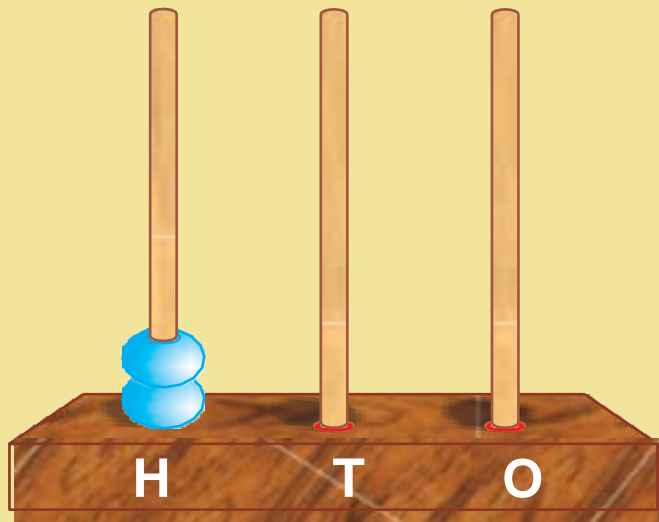
1 hundred, 8 ten and 0
one One hundred eighty

180



1 hundred, 9 ten, and 0
ones One hundred ninety

190



2 hundred, 0 ten and 0 one
Two hundred

200

Read the numerals from 101 to 200.

101	111	121	131	141	151	161	171	181	191
102	112	122	132	142	152	162	172	182	192
103	113	123	133	143	153	163	173	183	193
104	114	124	134	144	154	164	174	184	194
105	115	125	135	145	155	165	175	185	195
106	116	126	136	146	156	166	176	186	196
107	117	127	137	147	157	167	177	187	197
108	118	128	138	148	158	168	178	188	198
109	119	129	139	149	159	169	179	189	199
110	120	130	140	150	160	170	180	190	200

1 Hundred



10 Tens



100

2 Hundred



20 Ten



200

3 Hundred



30 Ten



300

4 Hundred



40 Ten

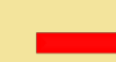


400

5 Hundred



50 Ten



500

6 Hundred



60 Ten



600

7 Hundred



70 Ten



700

8 Hundred



80 Ten



800

9 Hundred



90 Ten



900

10 Hundred

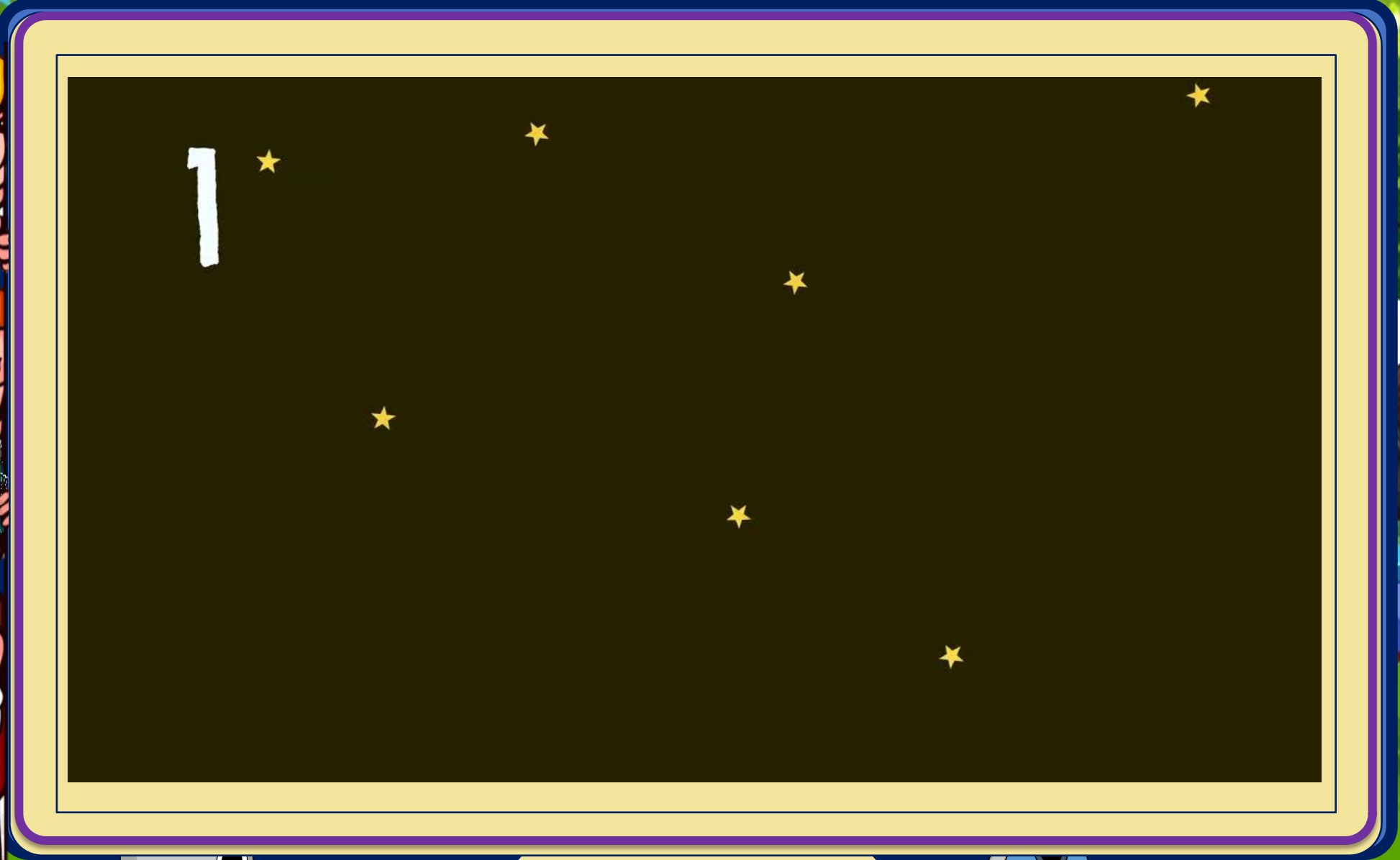


100 Ten

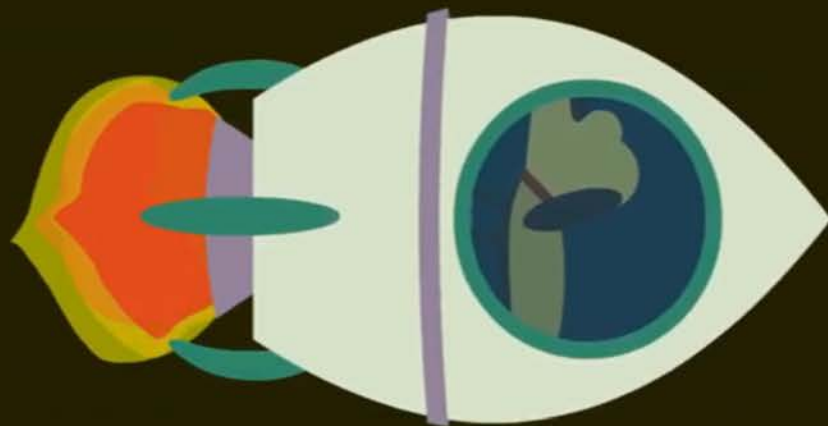


1000





100



one hundred



Read the numerals from 201 to 300.

201	211	221	231	241	251	261	271	281	291
202	212	222	232	242	252	262	272	282	292
203	213	223	233	243	253	263	273	283	293
204	214	224	234	244	254	264	274	284	294
205	215	225	235	245	255	265	275	285	295
206	216	226	236	246	256	266	276	286	296
207	217	227	237	247	257	267	277	287	297
208	218	228	238	248	258	268	278	288	298
209	219	229	239	249	259	269	279	289	299
210	220	230	240	250	260	270	280	290	300



201 to 300

Numbers With Spellings



211

Two Hundred & Eleven



231

Two Hundred & Thirty One





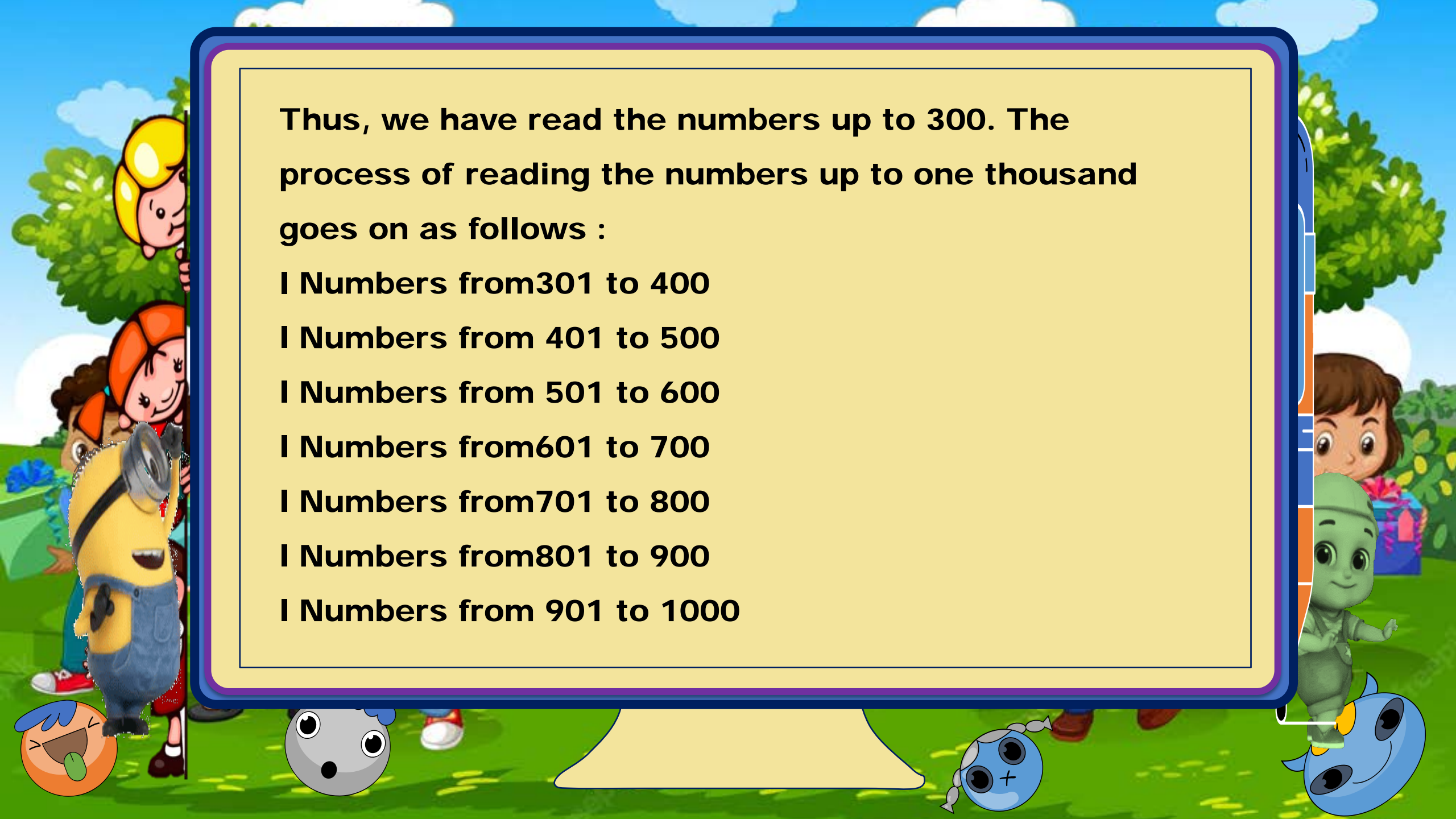
241

Two Hundred & Forty One



251

Two Hundred & Fifty One



Thus, we have read the numbers up to 300. The process of reading the numbers up to one thousand goes on as follows :

I Numbers from 301 to 400

I Numbers from 401 to 500

I Numbers from 501 to 600

I Numbers from 601 to 700

I Numbers from 701 to 800

I Numbers from 801 to 900

I Numbers from 901 to 1000

Read the numerals from 301 to 400.

301	311	321	331	341	351	361	371	381	391
302	312	322	332	342	352	362	372	382	392
303	313	323	333	343	353	363	373	383	393
304	314	324	334	344	354	364	374	384	394
305	315	325	335	345	355	365	375	385	395
306	316	326	336	346	356	366	376	386	396
307	317	327	337	347	357	367	377	387	397
308	318	328	338	348	358	368	378	388	398
309	319	329	339	349	359	369	379	389	399
310	320	330	340	350	360	370	380	390	400

One Thousand



9 hundreds, 9 tens and 9 ones

$$900 + 90 + 9$$

999

Nine hundred ninety-nine



1 thousand, 0 hundred, 0 ten and 0 one

$$1000 + 0 + 0 + 0$$

1000

One Thousand

999 and **1** more make One Thousand.

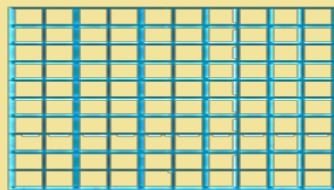
$$999 + 1 = 1000$$



10 ones

One ten

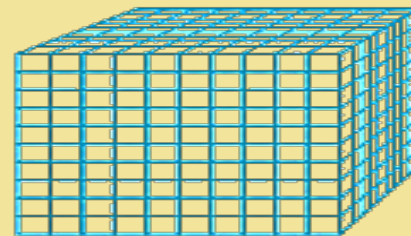
10



10 tens

One hundred

100



10 hundreds

One thousand

1000

Comparison of Numbers

GREATER THAN (>) / LESS THAN (<)

Which is greater, 16 or 9 ?

$$\boxed{16} > \boxed{9} \quad \text{or} \quad \boxed{9} < \boxed{16}$$

has two digits

has one digit

So, 16 is **greater than** 9 or 9 is **less than** 16.

f A number containing more digits will be greater number.
A number containing less digits will be smaller number.

Examples :

It has two digits \leftarrow 29 $>$ 9 \rightarrow It has one digit

It has three digits \leftarrow 112 $>$ 99 \rightarrow It has two digits

It has three digits \leftarrow 999 $<$ 1000 \rightarrow It has four digits



2 If two numbers have same number of digits, we compare them by their left-most digits.

EXAMPLE : Which is greater, **318** or **224** ?

SOLUTION : 318 and 224 have three digits each.

But, their left-most digits are **3** and **2**.



It shows that **318 > 224**.

Hence, **318** is the greater one.

Also, we can say that 224 is the smaller number, i.e. $224 < 318$.



3 If two numbers with same number of digits have their left-most digits same, we compare them by their next digits from left and so on.

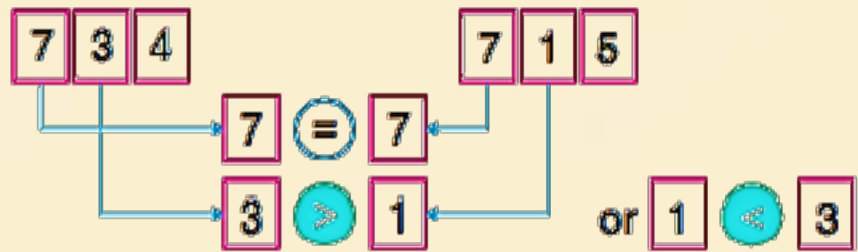
EXAMPLE 1 : Which is smaller, 734 or 715 ?

SOLUTION : 734 and 715 have three digits each.

Also, their left-most digits are 7 and 7.

But, next digits from the left-most digits are 3 and 1.





It shows that $734 > 715$ or $715 < 734$.
Hence, **715** is the smaller number.



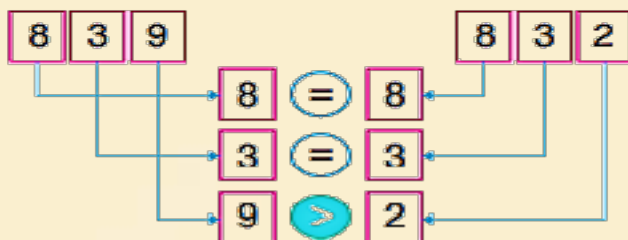
EXAMPLE 2 : Which is greater, **839** or **832** ?

Solution : 839 and 832 have three digits each.

Their left-most digits are **8** and **8**.

Also, next digits from the left-most are **3** and **3**.

But, next digits from left are **9** and **2**.



It shows that **839 > 832**.

Hence, **839** is the greater number.



Ordering of Numbers

INCREASING ORDER (ASCENDING ORDER)

Let us rearrange the following numbers in the increasing order, *i.e.*, smallest to greatest numbers **316, 370, 210, 300, 251, 269, 327**
In the above numbers, the smallest number is **210** and the greatest number is **370**.



Increasing order is :

210, 251, 269, 300, 316, 327, 370

$210 < 251 < 269 < 300 < 316 < 327 < 370$



DECREASING ORDER (DESCENDING ORDER)

Let us rearrange the following numbers in the decreasing order, i.e., greatest to smallest numbers.

417, 824, 539, 627, 650, 790, 802

In the above numbers, the greatest number is 824 and the smallest number is 417.

Decreasing order is given by,
824, 802, 790, 650, 627, 539, 417.

Or

$824 > 802 > 790 > 650 > 627 > 539 > 417.$



Comparison of Numbers

GREATER THAN ($>$) / LESS THAN ($<$)

Which is greater, 16 or 9 ?

$$\boxed{16} > \boxed{9} \quad \text{or} \quad \boxed{9} < \boxed{16}$$

has **two** digits

has **one** digit

So, 16 is greater than 9 or 9 is less than 16.

1. A number containing more digits will be greater number.
A number containing less digits will be smaller number.

Examples :

It has **two** digits \leftarrow **29** $>$ **9** \rightarrow It has **one** digit

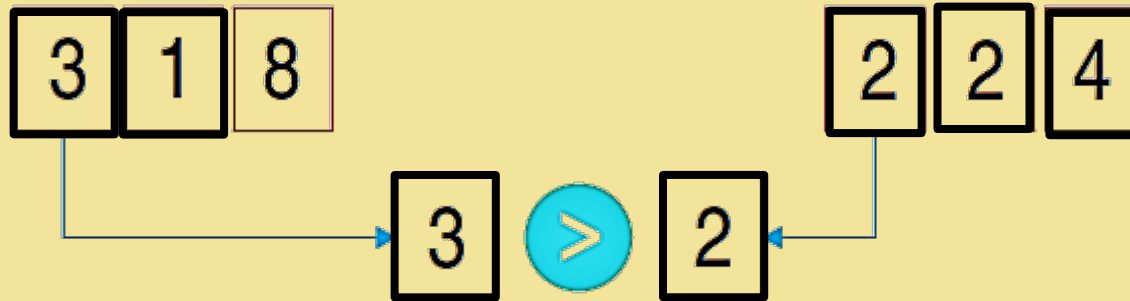
It has **three** digits \leftarrow **112** $>$ **99** \rightarrow It has **two** digits

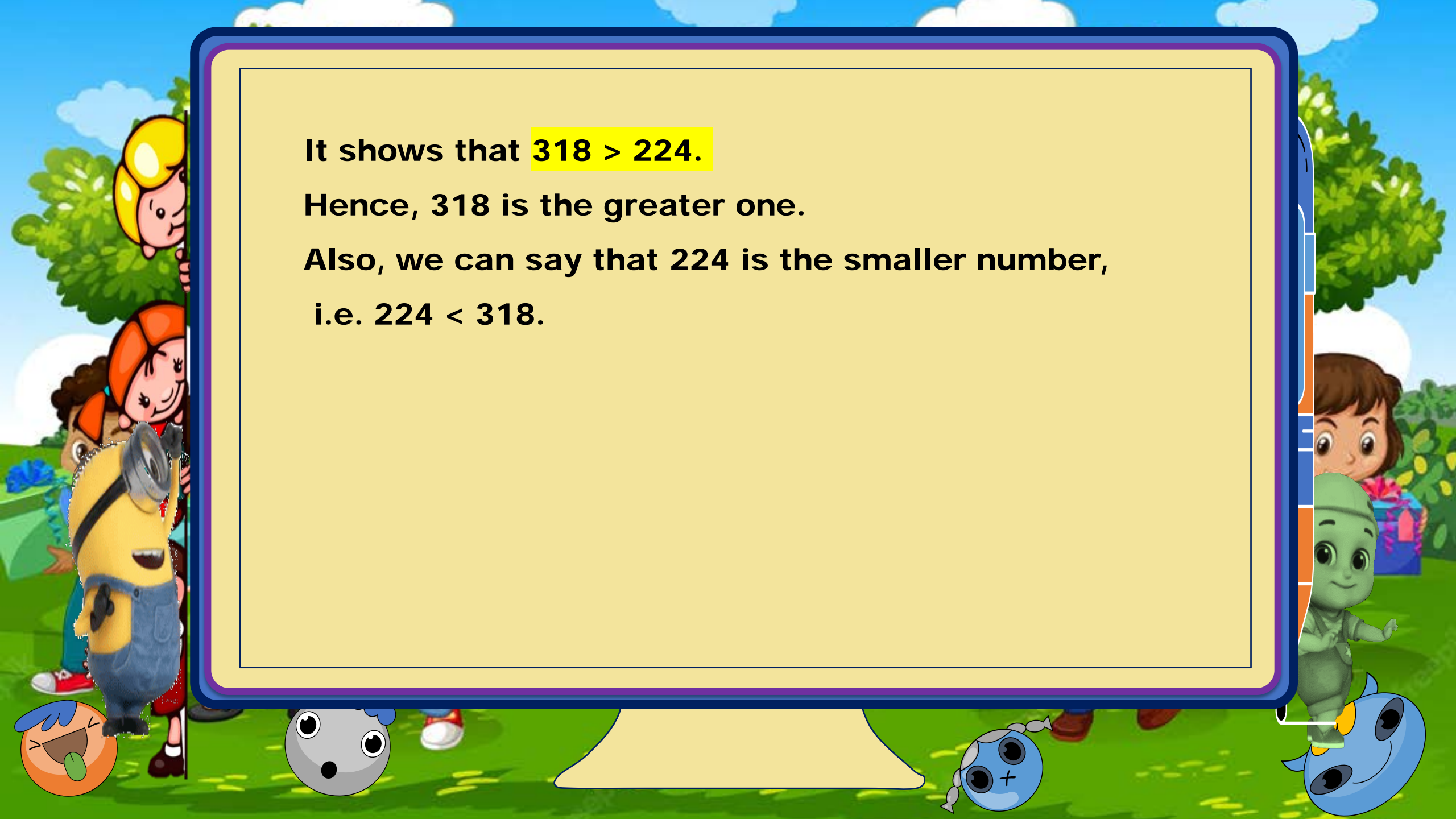
It has **three** digits \leftarrow **999** $<$ **1000** \rightarrow It has **four** digits

2. If two numbers have same number of digits, we compare them by their left-most digits.

EXAMPLE : Which is greater, 318 or 224 ?

SOLUTION : 318 and 224 have three digits each. But, their left-most digits are 3 and 2





It shows that $318 > 224$.

Hence, 318 is the greater one.

Also, we can say that 224 is the smaller number,

i.e. $224 < 318$.

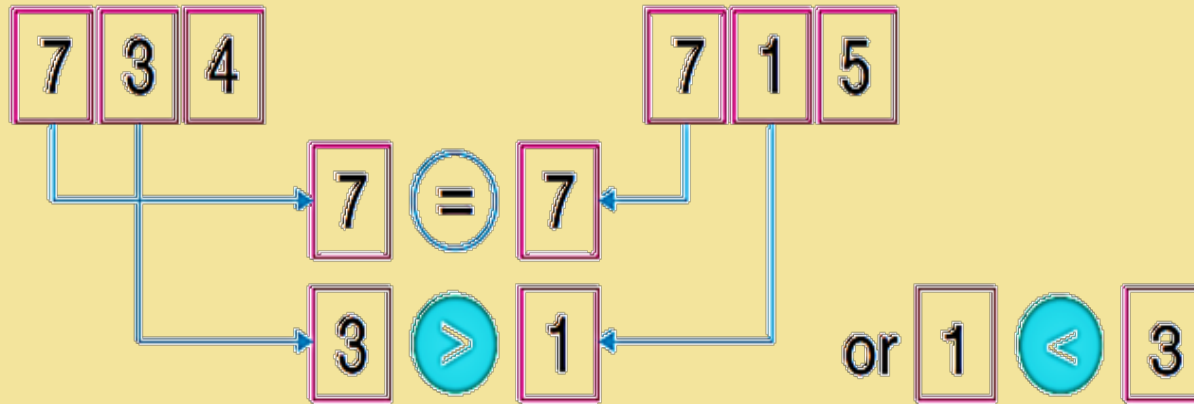
3. If two numbers with same number of digits have their left-most digits same, we compare them by their next digits from left and so on. 3

EXAMPLE 1 : Which is smaller, 734 or 715 ?

SOLUTION : 734 and 715 have three digits each.

Also, their left-most digits are 7 and 7.

But, next digits from the left-most digits are 3 and 1.



It shows that $734 > 715$ or $715 < 734$.

Hence, 715 is the smaller number.



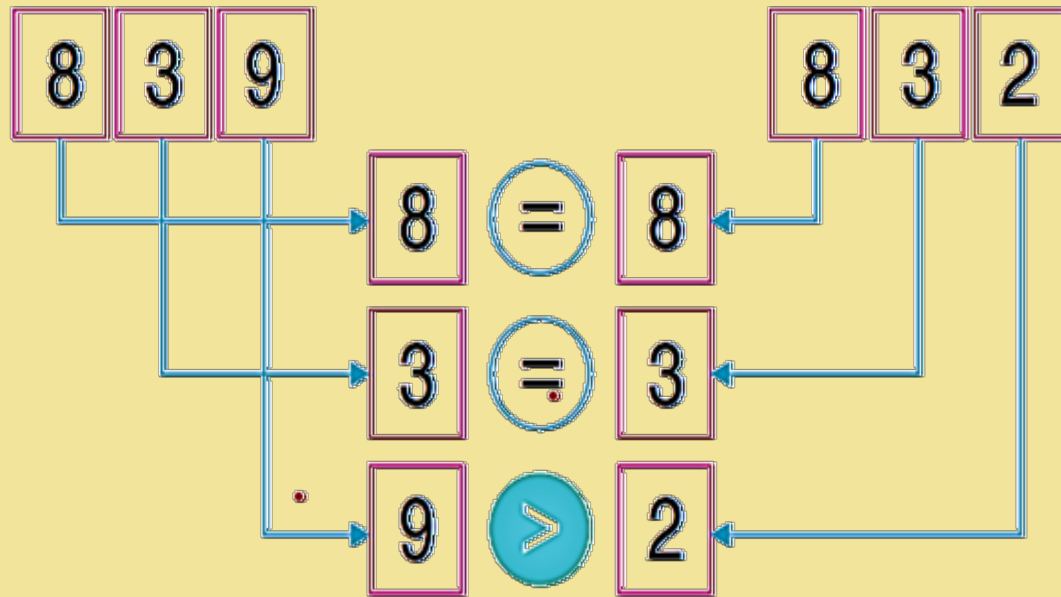
EXAMPLE 2 : Which is greater, 839 or 832 ?

Solution : 839 and 832 have three digits each.

Their left-most digits are 8 and 8.

Also, next digits from the left-most are 3 and 3.

But, next digits from left are 9 and 2



It shows that **839 > 832.**

Hence, **839** is the greater number.

ORDERING OF NUMBERS

INCREASING ORDER (ASCENDING ORDER)

Let us rearrange the following numbers in the increasing order, i.e., smallest to greatest numbers.

316, 370, 210, 300, 251, 269, 327

In the above numbers, the smallest number is 210 and the greatest number is 370.

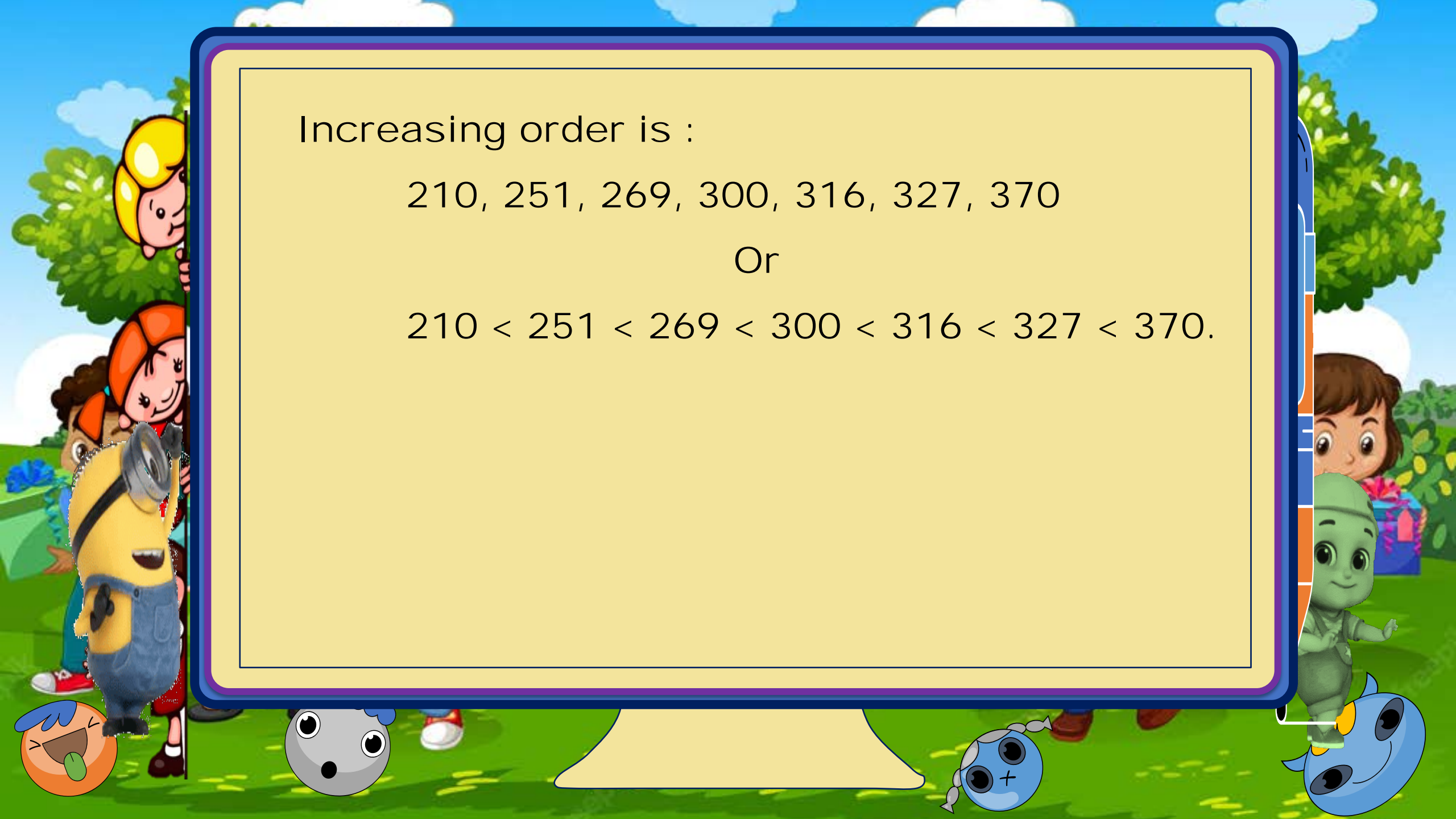


Increasing order is :

210, 251, 269, 300, 316, 327, 370

Or

$210 < 251 < 269 < 300 < 316 < 327 < 370.$

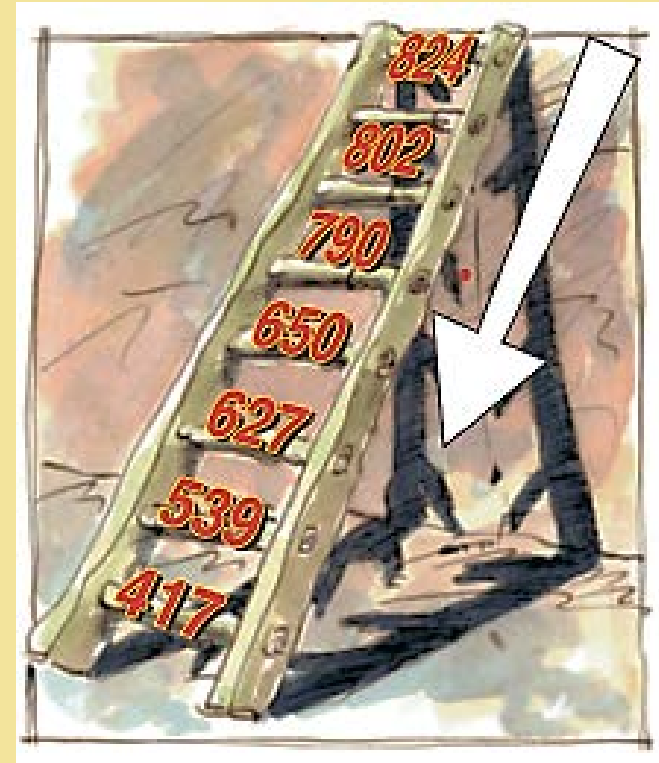


DECREASING ORDER (DESCENDING ORDER)

Let us rearrange the following numbers in the decreasing order, i.e., greatest to smallest numbers.

417, 824, 539, 627, 650, 790, 802

In the above numbers, the greatest number is 824 and the smallest number is 417.



DECREASING ORDER (DESCENDING ORDER)

Increasing order is :

210, 251, 269, 300, 316, 327, 370

Or

$210 < 251 < 269 < 300 < 316 < 327 < 370$.

Decreasing order is given by,

824, 802, 790, 650, 627, 539, 417.

Or

$824 > 802 > 790 > 650 > 627 > 539 > 417$.



Thank
you