

Listing Combinations

NCTM Standards 1, 2, 6, 9, 10

List all of the two-digit numbers by using a tens digit from the shaded box and a ones digit from the white box.

1

4, 7	0
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4	0	7	0	X	X
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2	two-digit numbers
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	×	1	=	
choices for the tens digit		choices for the ones digit		number of two-digit numbers

2

4, 5	0, 1, 2, 3
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	two-digit numbers
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	×		=	
choices for the tens digit		choices for the ones digit		number of two-digit numbers

3

1, 2, 3	1, 2, 3
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	two-digit numbers
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	×		=	
choices for the tens digit		choices for the ones digit		number of two-digit numbers

One Sandwich **with** One Topping

Hamburger
Hot Dog
Fish

Onions
Ketchup
Mustard
Pickles

- 4 Predict the number of combinations of one kind of sandwich with one kind of topping.

$$\square \times \square = \square$$

sandwiches toppings combinations

- 5 List all the combinations for one kind of sandwich with one topping.

<input type="text"/>	with	<input type="text"/>	<input type="text"/>	with	<input type="text"/>
<input type="text"/>	with	<input type="text"/>	<input type="text"/>	with	<input type="text"/>
<input type="text"/>	with	<input type="text"/>	<input type="text"/>	with	<input type="text"/>
hamburger	with	pickles	<input type="text"/>	with	<input type="text"/>
<input type="text"/>	with	<input type="text"/>	<input type="text"/>	with	<input type="text"/>
<input type="text"/>	with	<input type="text"/>	<input type="text"/>	with	<input type="text"/>

- 6 **Challenge** Donna will not eat pickles or onions. Write a multiplication sentence to find the number of combinations of one kind of sandwich with one topping that Donna will eat.

- 7 **Challenge** Dino will not eat hot dogs or hamburgers. Write a multiplication sentence to find the number of combinations of one kind of sandwich with one topping that Dino will eat.