Lesson Printables

Be a rockstar and only print what you need!

Planners: 2-3		
Picture Prompts: Sunlight: 4 Twilight: 5 Midnight: 6	**Extras** Stem Sentences: 7 Extension Picture: 8	**Answers** Sunlight: 9 Twilight: 10 Midnight: 11 Extension: 12

**Printing in the US? Scale to 'fit to printable area' in order to get the best print.*

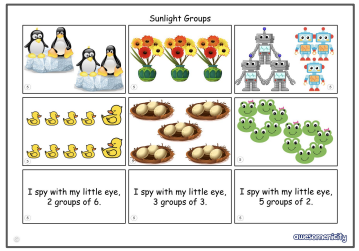
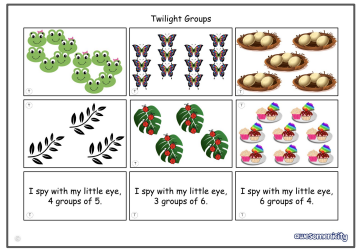
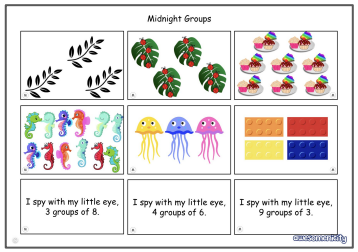
LESSON 1: Multiplication - Intro to equal groups

Starter	Main Activity and Input: Using pictures to identify equal groups and the number sentences that match.	Plenary
Number Trees: How could students use the digits 1 to 9 to fill in the part/whole models? What numbers will be left out? **To support:** 1. Ask students what information the part/whole model is showing them. (Part + part = whole) What can students do with this information if they know the whole is 10 or 20? **To challenge:** 1. How many different possible solutions can students find?	**Input:** 1. Slide 6 explains that students are going to be looking for equal groups in this lesson. What does this mean? Ask students to discuss the idea of equal groups with each other and then share ideas as a class. 2. Slide 7 shows equal groups of socks. How can students prove that the groups are equal? Elicit that there are 3 groups of socks and each group has the same amount of socks in it. If you have counters, you could give these out to students so that they can create the equal groups. Ask students how they could count the socks. Is there more than 1 way? Ask students to come to the board to explain their thinking. 3. Slide 8 shows that students could count the socks using repeated addition (2 + 2 + 2). Slide 9 shows that students could also use multiplication to calculate the sock total (3 x 2 or 2 x 3). Slide 10 further explains that multiplication is repeated addition. 2 + 2 + 2 can also be written as 2 x 3 (2 pairs in each group with 3 groups in total) or 3 x 2 (3 groups with 2 pairs in each group). Note, in this scenario, we are avoiding the number sentence 3 + 3 due to the fact that it doesn't match the picture of the socks. Your students might point this out and it could be a discussion point in your class. In future lessons, when we inquire into skip counting, we will explore making two addition problems from a multiplication number sentence. 4. Slides 11 to 14 repeat the process of looking for equal groups. This time students will see two flowers with 5 bees on each flower. Encourage students to write at least one addition number sentence and one multiplication number sentence that could connect to the picture. Slides 12 to 14 reveal possible number sentences. 5. Slide 15 flips the scenario. Instead of showing a picture, we have asked students what 2 groups of 4 might look like. Students could draw a picture or group items from the classroom in order to demonstrate their understanding. On slide 16 we have shown 2 ladybugs with 4 spots on each bug. **Activity: Picture groups and 'I Spy' statements.** 1. Print the picture prompts for each learning zone. Students could have individual copies to stick in their books or you could print several copies for students to share. Instead of printing these pictures, you could set up different groups around your classroom. For example, equal groups of pencils, chairs, pegs, books, etc. Students could work in pairs or small groups to write number sentences based on the groups that they see. **To support:** 1. Allow students to use blocks or counters to physically create a copy of their picture. 2. Students could fill in the recording logs found in the printables. **To challenge:** 1. Ask students to write the answers to their number sentences. 2. Students could look for 'secret' number sentences found in the farmyard extension picture found in the printables.	**Group 'em Up:** Can students organise themselves (or other objects) into equal groups? (Students should lead the grouping.) **Check for understanding:** 1. Can students identify ways to group the number of students in the class? You could put students into small groups (E.g. 6) and they can explore how many different ways they can group themselves equally. For example, 1 group of 6, 2 groups of 3, 3 groups of 2, etc.

Things that might be useful for this lesson:

- Individual whiteboards:
  - ➔ Help students to record their thinking and share ideas with others.
- Counters/blocks:
  - ➔ Help students to form groups and create number sentences.
- Recording logs:
  - ➔ Help students to organise their thinking steps and create their number sentences.

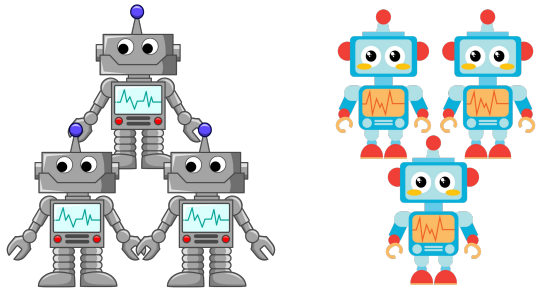
Peek at the Printables:

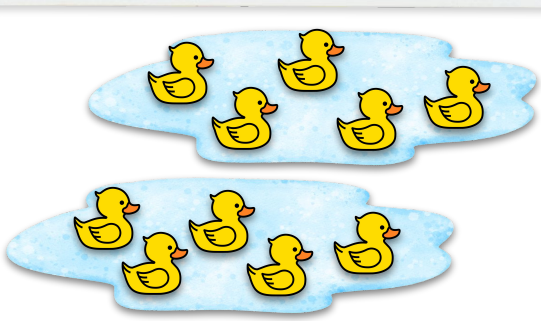
Sunlight Zone	Twilight Zone	Midnight Zone
		

Greener Alternatives:

- ➔ Make different groups using items in your classroom. For example, groups of pencils, 5 pencils in each group. Students could move about your classroom, creating number sentences based on your groups.
- ➔ Students could draw pictures to swap with a partner. The partner could look for addition and multiplication number sentences in the picture.

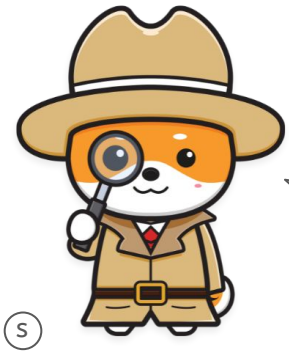
Sunlight Groups





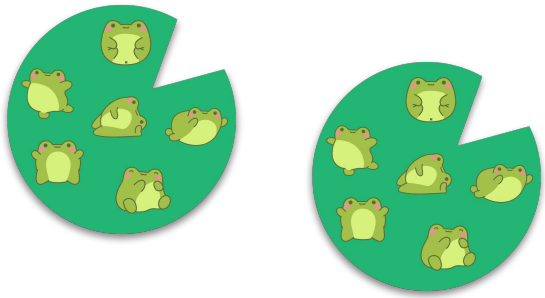
I spy with my little eye, **2 groups of 6.**

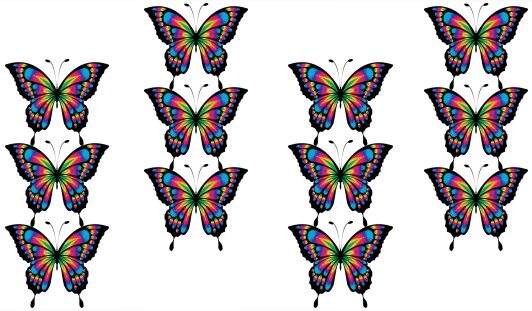
I spy with my little eye, **3 groups of 3.**

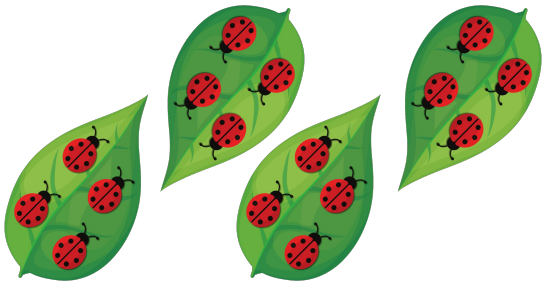


I spy with my little eye, **5 groups of 2.**

Twilight Groups

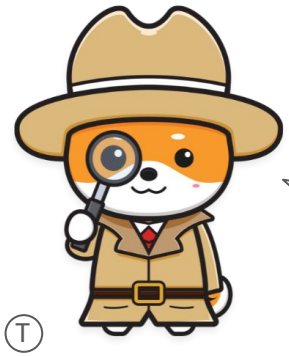






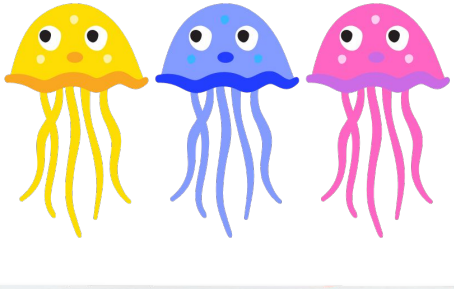
I spy with my little eye, **4 groups of 5.**

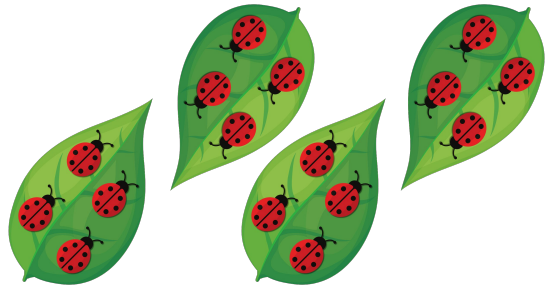
I spy with my little eye, **3 groups of 6.**



I spy with my little eye, **6 groups of 4.**

Midnight Groups



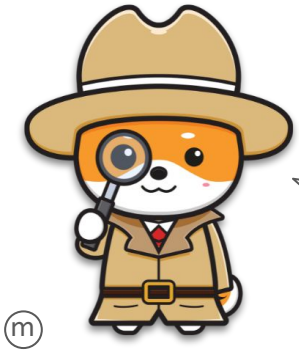


I saw 3 ponds.
Each pond had 7 ducks in it.
What number sentences could you use to count all the ducks?

There are 4 ships floating at sea. There are 3 pirates on each ship. What number sentences could you use to count all the pirates?

I spy with my little eye,
3 groups of 8.

I spy with my little eye,
4 groups of 6.



I spy with my little eye,
9 groups of 3.

Recording Log

I see _____ equal groups.

There are _____ in each group.

Addition Number Sentence

Multiplication Number Sentence

I see _____ equal groups.

There are _____ in each group.

Addition Number Sentence

Multiplication Number Sentence

I see _____ equal groups.

There are _____ in each group.

Addition Number Sentence

Multiplication Number Sentence

I see _____ equal groups.

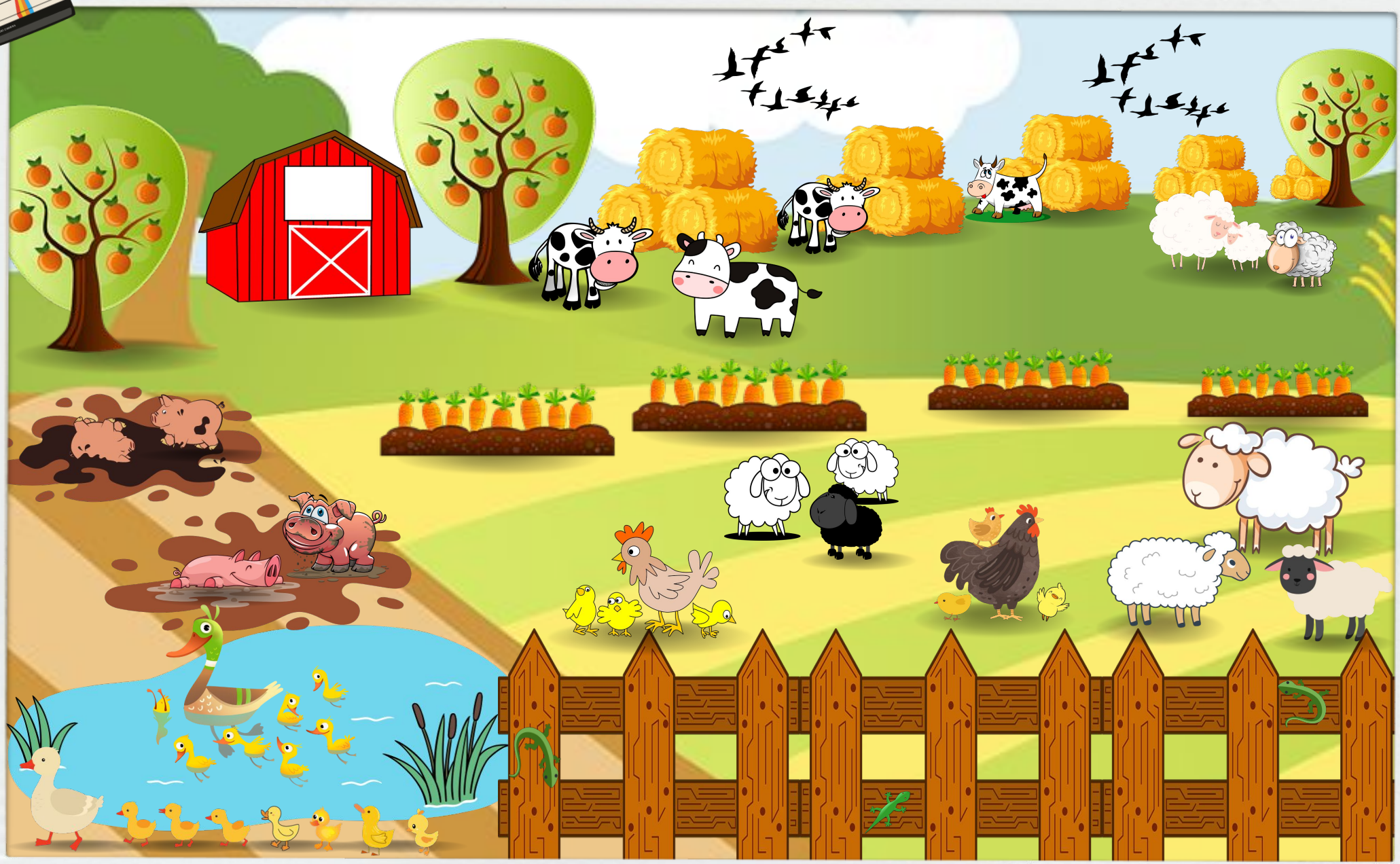
There are _____ in each group.

Addition Number Sentence

Multiplication Number Sentence

Farmyard Challenge

How many different addition or multiplication number sentences can you spot?

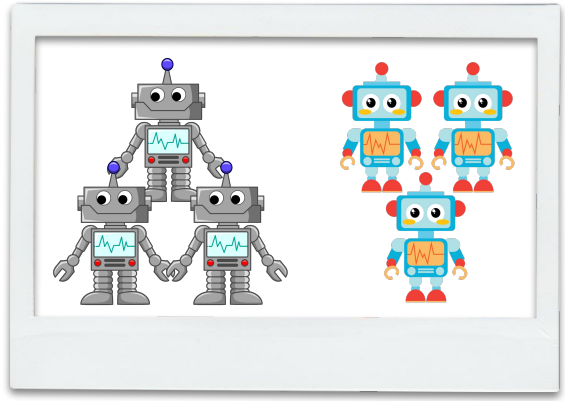


Sunlight Answers

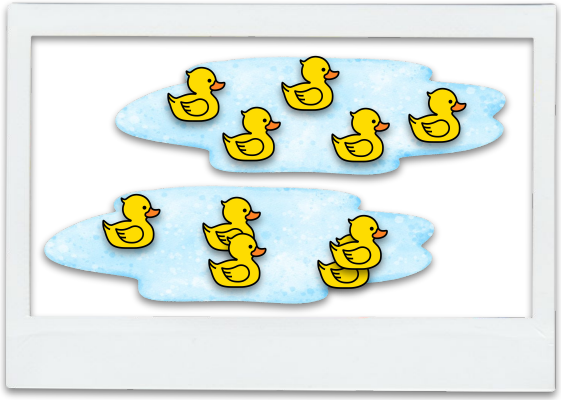
Answers could vary depending on what groups students see.
Students should write an addition and multiplication number sentence to match the pictures.
To check the 'I spy' answers, look to see that students' drawings match the number sentence.

2 x 2 = 4
2 + 2 = 4

3 x 5 or 5 x 3
5 + 5 + 5 = 15

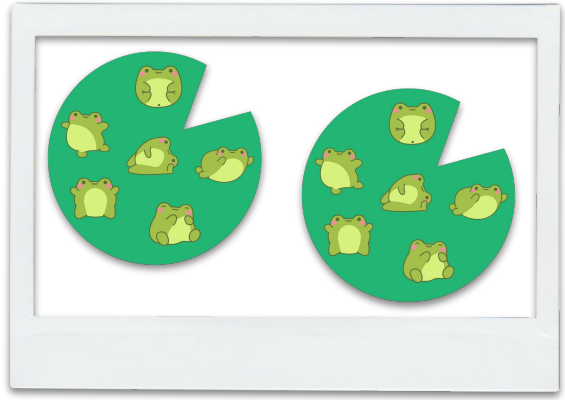


2 x 3 or 3 x 2
3 + 3 = 6



2 x 5 or 5 x 2
5 + 5 = 10

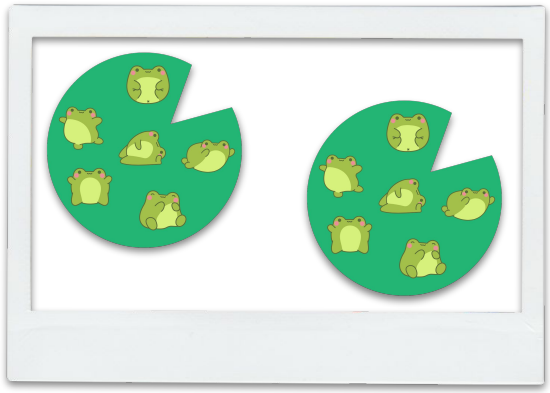
3 x 5 or 5 x 3
3 + 3 + 3 + 3 + 3 = 15



2 x 6 or 6 x 2
6 + 6 = 12

Twilight Answers

Answers could vary depending on what groups students see.
Students should write an addition and multiplication number sentence to match the pictures.
To check the 'I spy' answers, look to see that students' drawings match the number sentence.

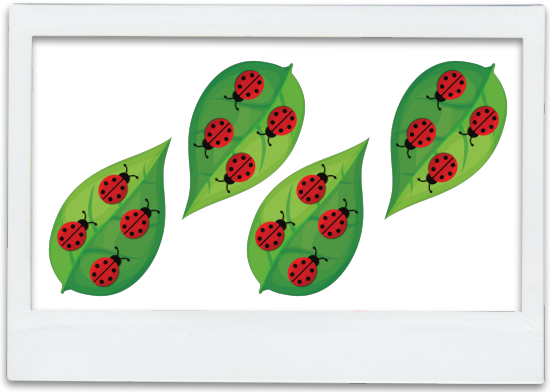


2 x 6 or 6 x 2
6 + 6 = 12

3 x 4 or 4 x 3
3 + 3 + 3 + 3 = 12

3 x 5 or 5 x 3
3 + 3 + 3 + 3 + 3 = 15

3 x 9 or 9 x 3
9 + 9 + 9 = 27

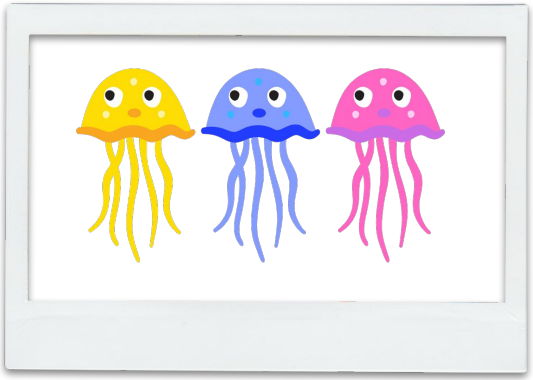


4 x 4
4 + 4 + 4 + 4 = 16

3 x 6 or 6 x 3
3 + 3 + 3 + 3 + 3 + 3 = 18

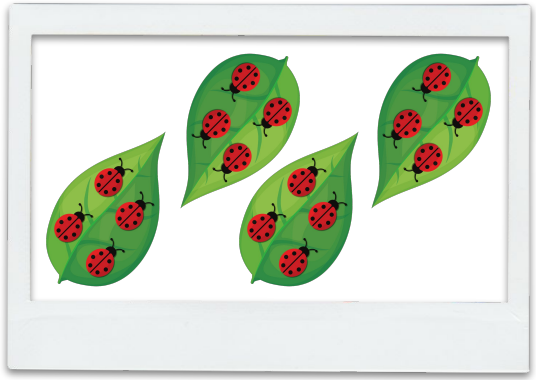
Midnight Answers

Answers could vary depending on what groups students see.
Students should write an addition and multiplication number sentence to match the pictures.
To check the 'I spy' answers, look to see that students' drawings match the number sentence.



Each jellyfish has 5 tentacles.
5 x 3 or 3 x 5
5 + 5 + 5 = 15

3 x 8 or 8 x 3
3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 = 24



4 x 4
4 + 4 + 4 + 4 = 16

Each block has 8 dimples.
4 x 8 or 8 x 4
8 + 8 + 8 + 8 = 32

I saw 3 duck ponds.
Each pond had 7 ducks in it.
What number sentences could you use to count all the ducks?

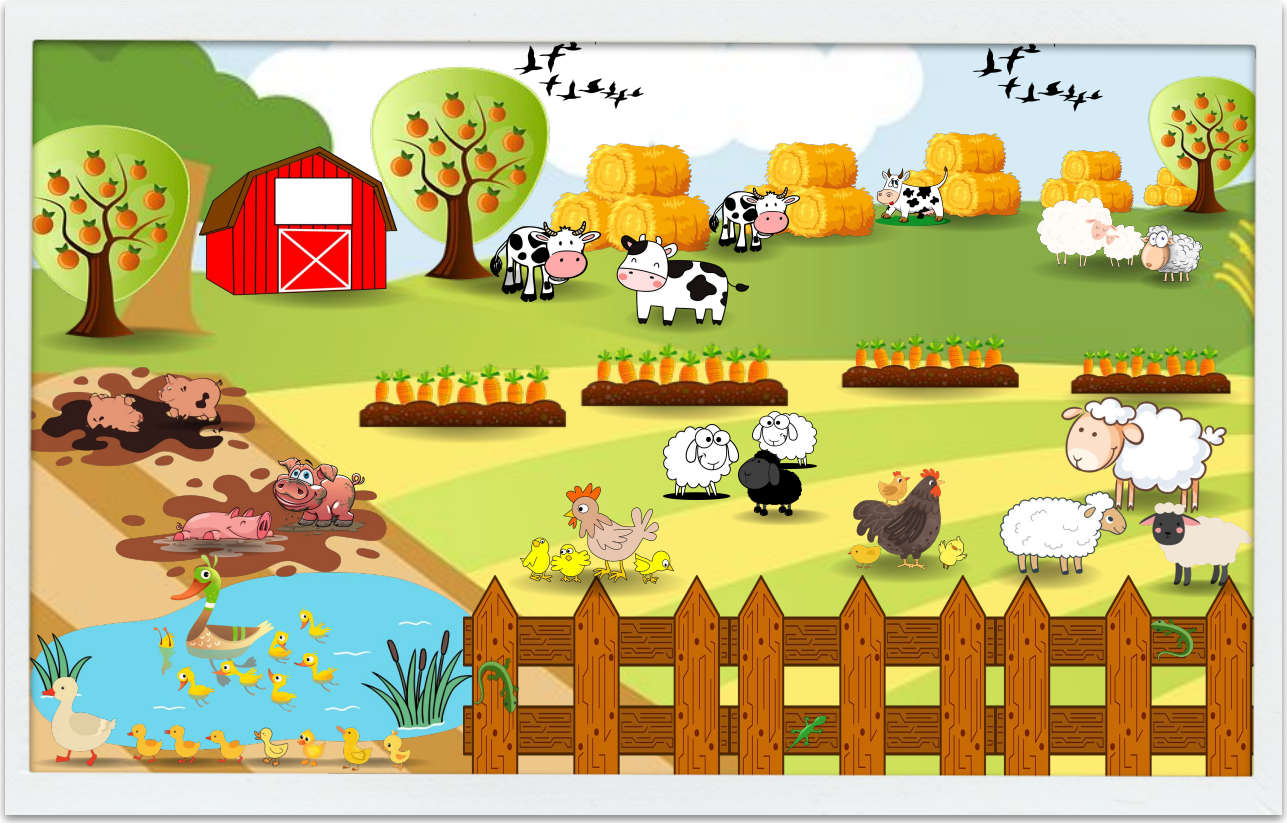
3 x 7 or 7 x 3
7 + 7 + 7 = 21

There are 4 ships floating at sea. There are 3 pirates on each ship. What number sentences could you use to count all the pirates?

4 x 3 or 3 x 4
3 + 3 + 3 + 3 = 24

Extension Answers

This picture could have many answers. Below are a few examples.



3 groups of 3 sheep. 3 x 3 = 9 3 + 3 + 3	2 groups of 8 ducks. 2 x 8 = 16 8 + 8	4 cows with 4 legs each. 4 x 4 = 16 4 + 4 + 4 + 4
6 nails on each fence post. 9 fence posts in total. 6 x 9 or 9 x 6 6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 + 6	2 pigs in each mud pile. 2 mud piles in total. 2 x 2 2 + 2	5 hay bales. 3 bales in each group. 3 x 5 or 5 x 3 3 + 3 + 3 + 3 + 3