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WEBSITE: WWW.PLAYSTEAM.COM EMAIL: INFO@PLAYSTEAM.COM ADDRESS: SUITE 35 - 36 THE DESIGNWORKS,
PARK PARADE, LONDON, NW10 4HT. MANUFACTURED BY HANGZHOU ZT MODEL COMPANY LIMITED. ADDRESS: NO 6
MINGDE RD., PUYAN, BINJIANG, HANGZHOU, CHINA.





PLAY • READ • INSPIRE

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WARNING MESSAGE

GENERAL WARNING

Before you begin, please read through the instructions together with your children. Make sure you understand the safety messages. Please keep the packaging and instructions, as they contain important information.

This kit is designed for children over 3 years of age.

CHOKING HAZARD - Small parts, not for children under 3 years.

Children should have parental supervision when assembling the product.

Please clean the product with a clean cloth when necessary.

1 | WARNING MESSAGE

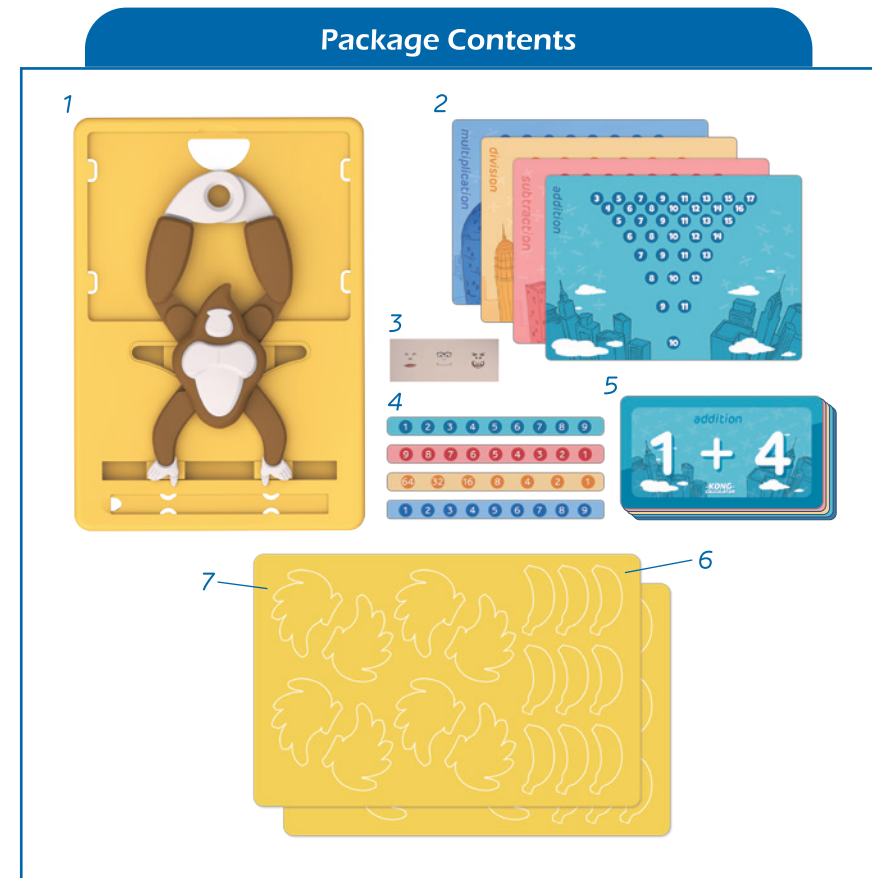
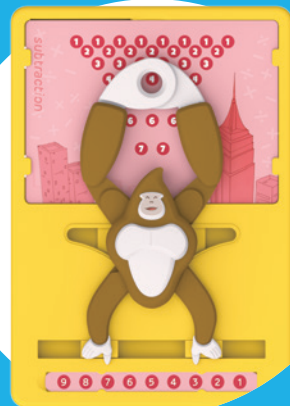




Read to be inspired!



2 | PACKAGE CONTENTS



Serial	Name	Quantity	Serial	Name	Quantity
1	Calculation instrument	1	5	Flash cards	20
2	Answer card	4	6	Counting bananas	18
3	Face stickers	1	7	Counting banana bunches	16
4	Equation Card	4			

3 | INSTALLATION

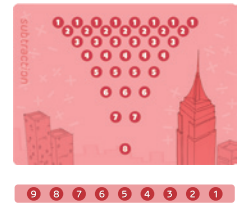


- 1 Select one of the 4 Answer Cards and the corresponding Equation Card and insert into the Calculation Instrument as shown.

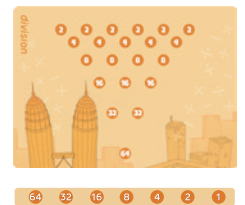
Answer card



Addition



Subtraction

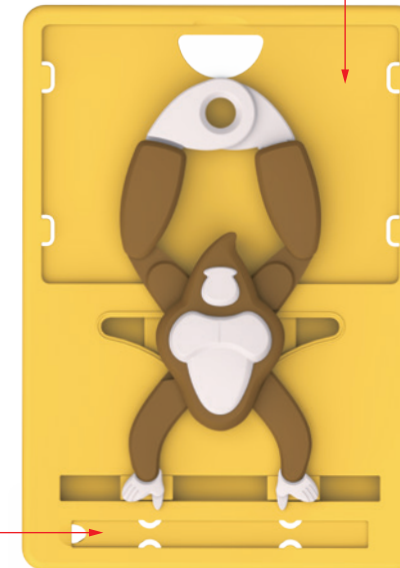


Division



Multiplication

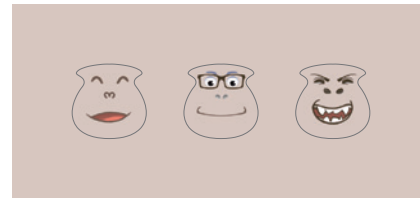
Calculation instrument



Equation Card



- 2 Attach the sticker onto the gorilla's face.



Stickers

Method of Application

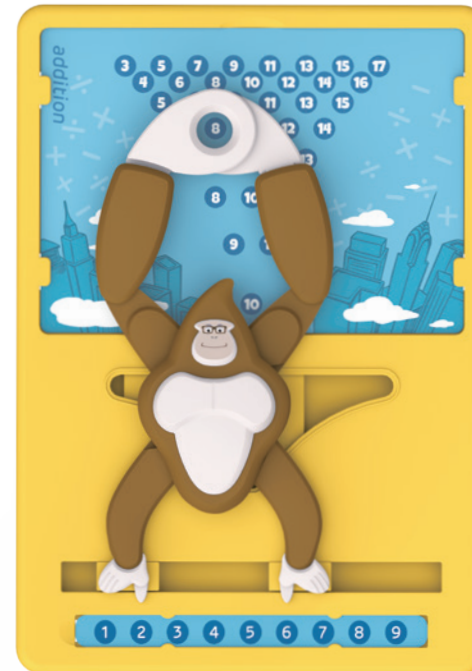
Let's take Addition as an example. Select a flash card at random, point out the input numbers with the big toes on the gorilla's left and right feet. The circle formed by the gorilla's arms shows the right answer. You can count the bananas to verify your answer.



Question card



Counting bananas



$$\text{2 bananas} + \text{6 bananas} = ?$$

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4 | ***FUN FACTS***



Read to be inspired!



Who invented addition?

It is believed that addition was invented by Chinese more than 6,000 years ago. We also have records showing that the Egyptians and Babylonians also used complex mathematics some 2 to 3 thousand years ago. However, all these old civilizations used different counting systems. Nowadays, we all use what we call the "Indo-Arabic numeral system", the 10 digits 0 to 9, used to represent numbers.



$$n! \approx \left(\frac{n}{e}\right)^n \cdot \sqrt{2\pi n}$$

$$P_n = \frac{n!}{(n-n)!} = \frac{n!}{0!}$$

$$A_n^k = \frac{n!}{(n-k)!}$$

$$A_n^k = n \cdot (n-1) \cdot (n-2) \cdot \dots \cdot (n-k+1)$$

$$\tilde{A}_n^k = \underbrace{n \cdot n \cdot \dots \cdot n}_k = n^k$$

$$\tilde{C}_n^m = P_{m, n-1} = \frac{(n+m-1)!}{m!(n-1)!}$$

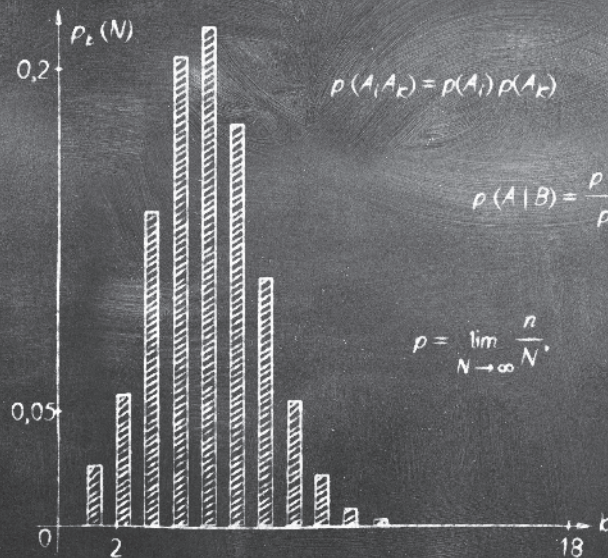
$$n_1, n_2, \dots, n_k = \frac{(n_1 + n_2 + \dots + n_k)!}{n_1! n_2! \dots n_k!}$$

$$C_n^k = \frac{n!}{k!(n-k)!}$$

$$(a+b)^n = C_n^0 a^n + C_n^1 a^{n-1} b^1 + \dots + C_n^{n-1} a^1 b^{n-1} + C_n^n b^n = \sum_{k=0}^n C_n^k a^{n-k} b^k$$

$$P(B) = P(B|A_1)P(A_1) + P(B|A_2)P(A_2) + P(B|A_3)P(A_3) + \dots + P(B|A_k)P(A_k)$$

$$p(x) = \frac{P(B|A_1)P(A_1)}{P(B|A_1)P(A_1) + P(B|A_2)P(A_2) + \dots + P(B|A_k)P(A_k)}$$



$$P(A_1 A_k) = P(A_1) P(A_k)$$

$$P(A|B) = \frac{P(AB)}{P(B)}$$

$$p = \lim_{N \rightarrow \infty} \frac{n}{N}$$

$$\sigma_n = \sqrt{\frac{\sum_{k=1}^n (x_k - \bar{x}_n)^2}{n}}$$

$$\sigma^2 = M_x^2 - (M_x)^2$$

$$p_k(\lambda) = \frac{\lambda^k}{k!} e^{-\lambda}$$

$$P_1 \leq x \leq x_2 = \int_{x_1}^{x_2} \phi(x) dx$$

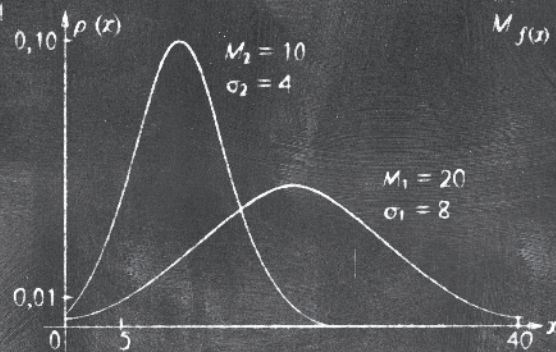
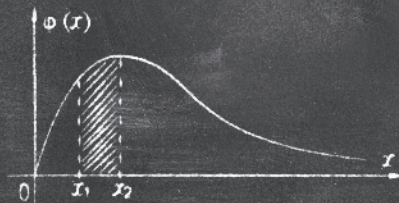
$$M_x = \sum_{i=1}^k p_i x_i$$

$$D_x = \sum_{i=1}^k p_i (x_i - M_x)^2$$

$$\phi(x) = \frac{1}{\sqrt{2\pi}\sigma} e^{-\frac{(x-a)^2}{2\sigma^2}}$$

$$\phi(x) = \frac{1}{\sigma\sqrt{2\pi}} e^{-\frac{x^2}{2\sigma^2}}$$

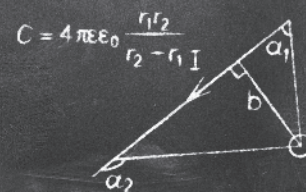
$$\phi(v) = 4\sqrt{\frac{k^3}{\pi}} v^2 e^{-kv^2}$$



$$\phi(\ln x) d(\ln x) = \frac{1}{\sqrt{2\pi}\sigma} e^{-\frac{(\ln x - a)^2}{2\sigma^2}} d(\ln x) = \frac{1}{\sqrt{2\pi}\sigma x} e^{-\frac{(\ln x - a)^2}{2\sigma^2}} dx$$

$$\langle r \rangle = \frac{\langle v \rangle t}{n\sqrt{2\pi}d^2}$$

$$C = \frac{\epsilon \epsilon_0 S}{d}$$

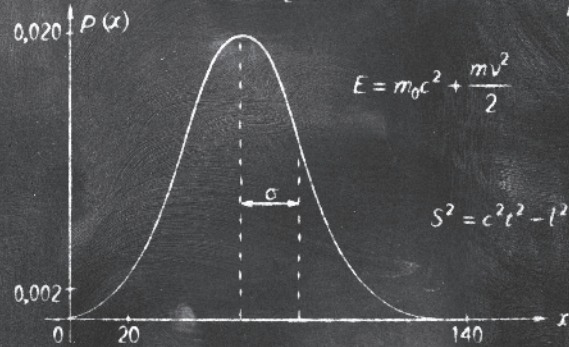


$$C = 4\pi\epsilon\epsilon_0 \frac{r_1 r_2}{r_2 - r_1} I$$

$$B = \frac{\mu_0 I}{2\pi b} (\cos \alpha_1 - \cos \alpha_2)$$

$$A^2 = A_1^2 + A_2^2 + 2A_1 A_2 \cos(\varphi_2 - \varphi_1)$$

$$h\nu = A + \frac{mv^2}{2}$$



$$E = m_0 c^2 + \frac{mv^2}{2}$$

$$m = m_0 / \sqrt{1 - \frac{v^2}{c^2}}$$

$$S^2 = c^2 t^2 - l^2 = i\nu$$

$$r_n = \frac{4\pi\epsilon_0 \eta^2 n^2}{mZe^2}$$

$$D_x = \int_{-\infty}^{+\infty} (x - M_x)^2 \phi(x) dx$$

$$M_x = \int_{-\infty}^{+\infty} x \cdot \phi(x) dx$$

$$M_{f(x)} = \int_{-\infty}^{+\infty} f(x) \phi(x) dx$$

$$S = v_0 t + \frac{at^2}{2}$$

$$F = G \frac{m_1 m_2}{R^2}$$

$$f(v) = 4\pi \left(\frac{m_0}{2\pi kT} \right)^{3/2} v^2 e^{-\frac{mv^2}{2kT}}$$


Read to be inspired!

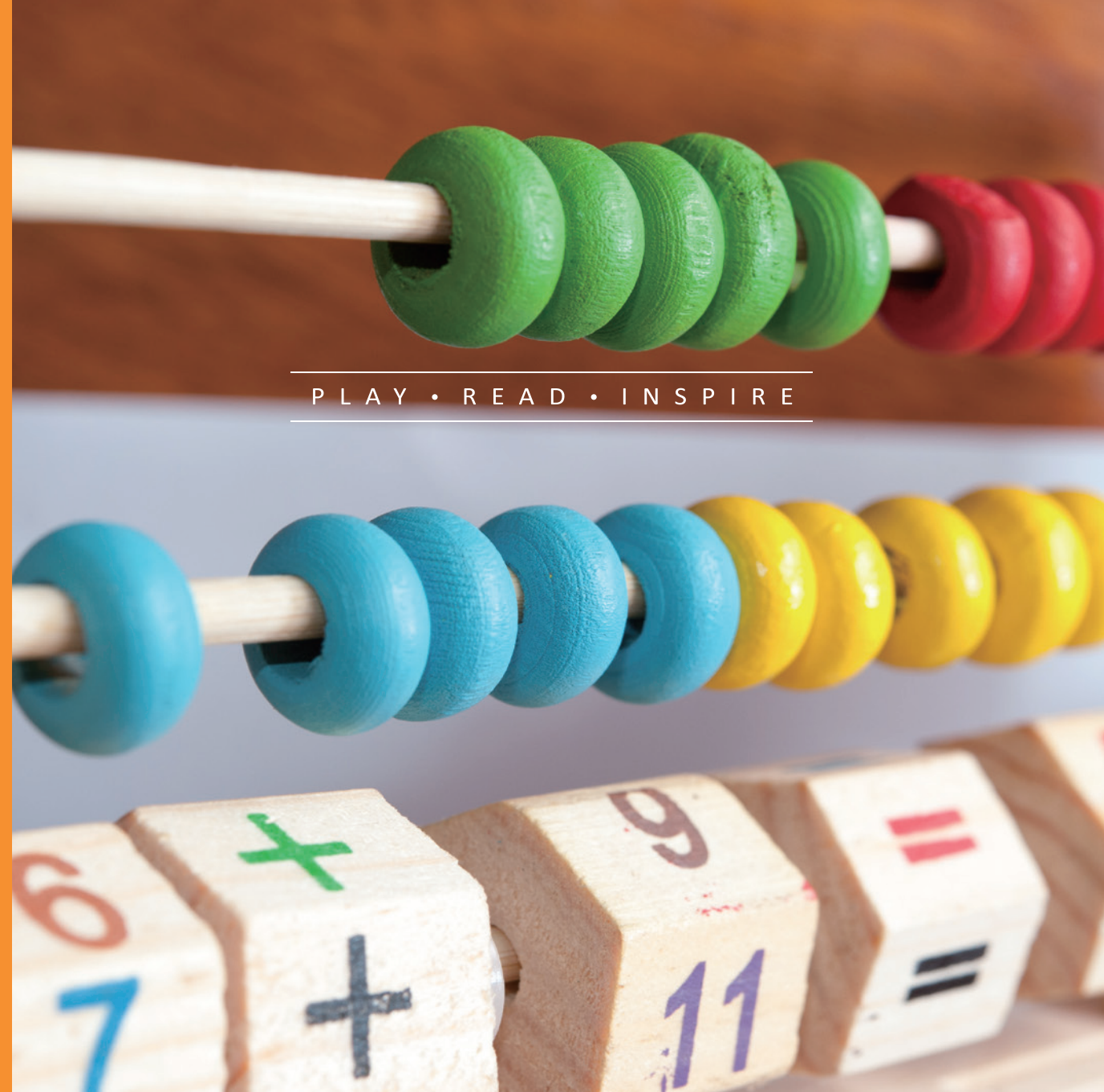
The basic operations of arithmetic

Arithmetic, from the Greek "number" and "art", is the study of numbers. Addition, Subtraction, Multiplication and Division are the four basic operations of "Arithmetic". Every mathematician has to master those four types of equations before studying more complex operations such as percentage or square roots. Let's train with the Kong and become a great mathematician.

5 | *ACTIVITIES*



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Warm up

Guide for Parents

You can practice the exercises on the next few pages to warm up your child according to these steps.

Ask your child to point to and count the number of bananas on Kong's left hand.



Emphasize the + (plus) symbol on top of Kong's head to familiarize the child with the addition symbol +.



Then, ask your child to point to and count the bananas on Kong's right hand.



Ask your child to count by pointing out the total number of bananas on both hands to get the result of their addition.



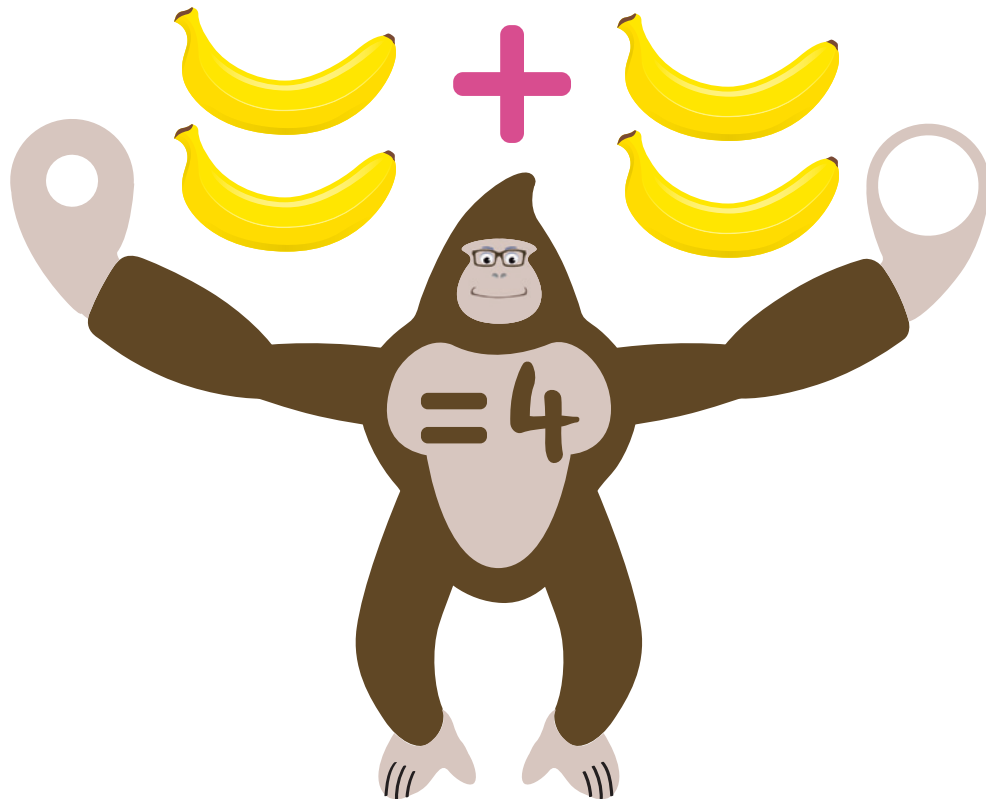
Check out the answer by pointing at Kong's tummy.



Exercise 1

Learning addition is fun and easy.

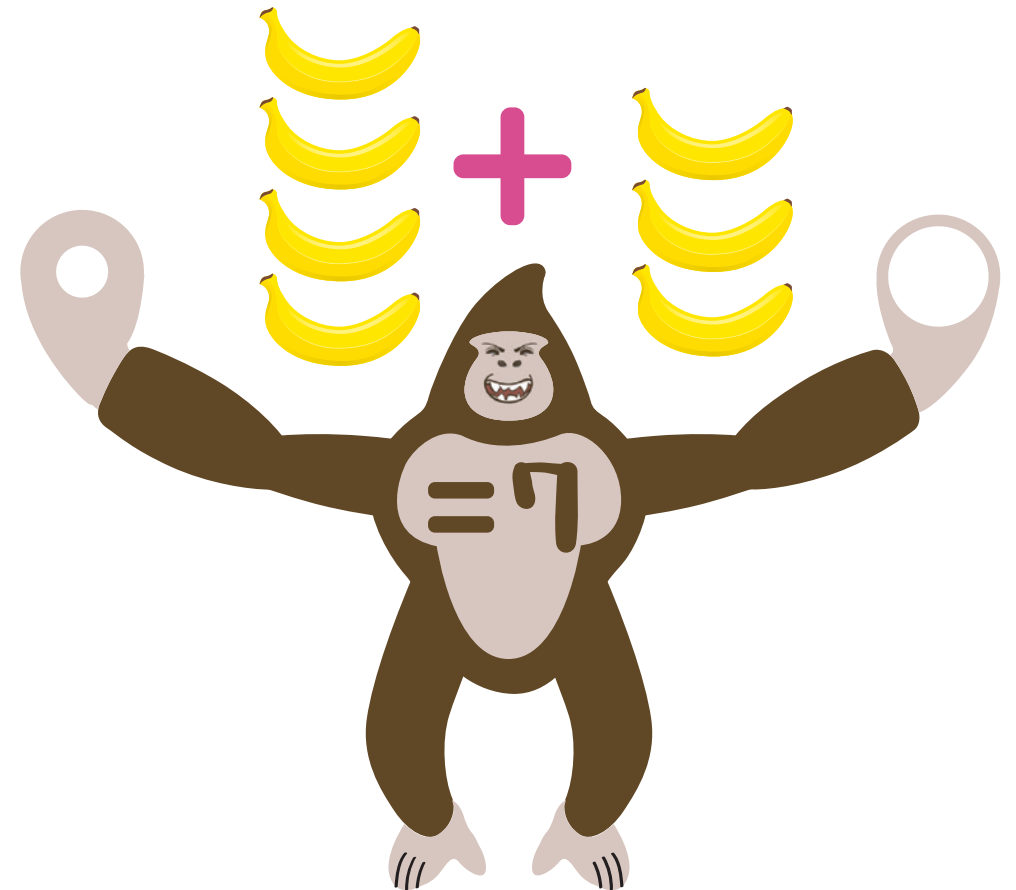
Let's ask Kong! (Kong spreads out his arms with two bananas in his left hand and another two in his right hand. Ask the child to do the addition $2+2=4$)



Exercise 2

Learning addition is fun and easy.

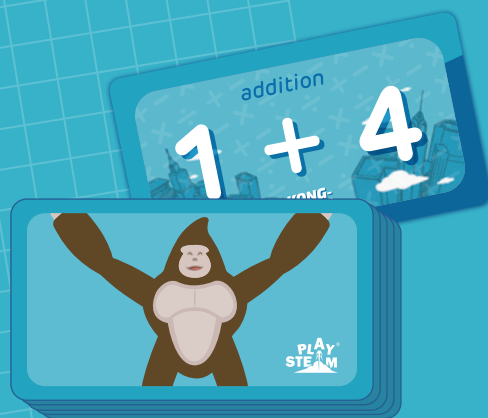
Let's ask the Kong! (Kong spreads out his arms with four bananas in his left hand and three in his right hand. Ask the child to do the addition $4+3=7$)



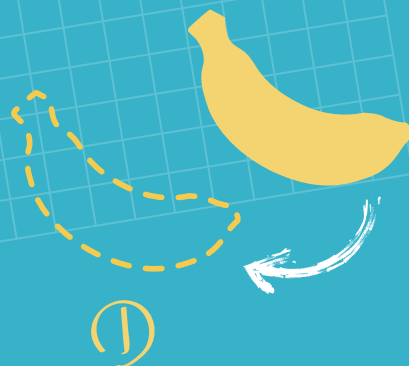
Learn Addition & Subtraction

Guide for Parents

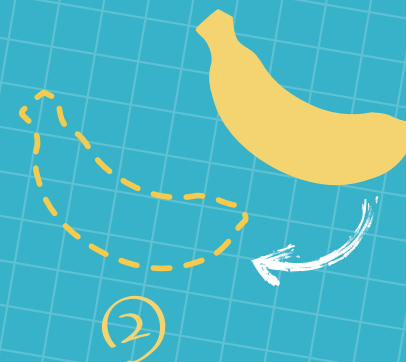
Draw one game card.



Ask the child to choose the respective quantity of bananas of the first number. Place the bananas onto the counting table.



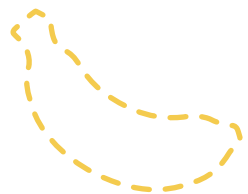
Then, choose the respective quantity of bananas of the second number. Place them onto the counting table right behind the first batch of bananas. Ask your child to point to and count the total number of bananas on the table.



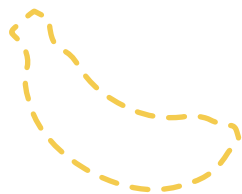
Want to ensure the correct answer?
Ask the Kong!

You can learn Subtraction with similar procedure. Remember subtraction is the reverse operation of addition.

Counting Table



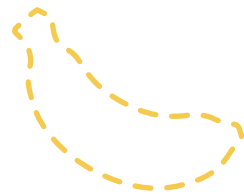
(1)



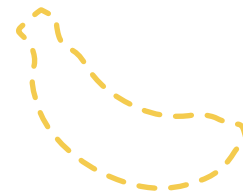
(2)



(3)



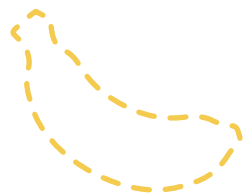
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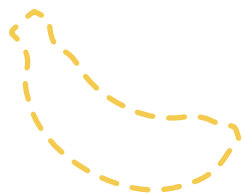
(11)



(12)



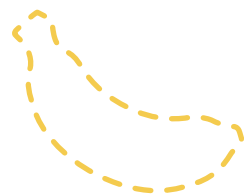
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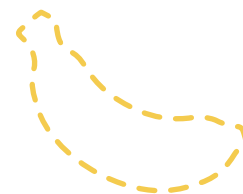
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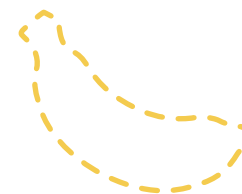
(6)



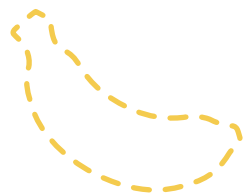
(13)



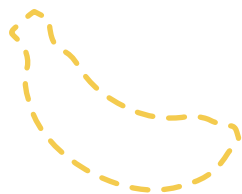
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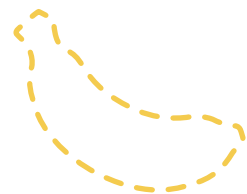
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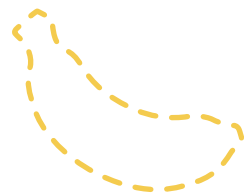
(7)



(8)



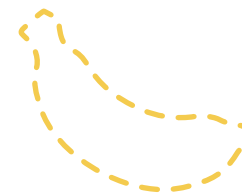
(9)



(16)



(17)

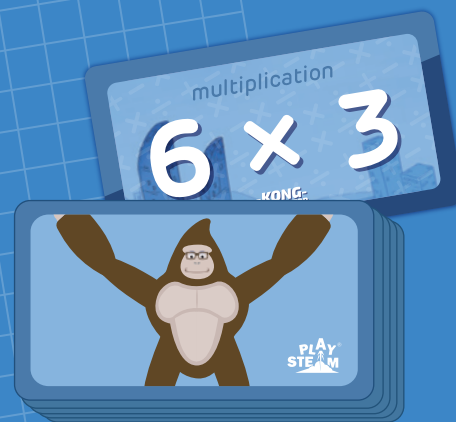


(18)

Learn Multiplication & Division

Guide for Parents

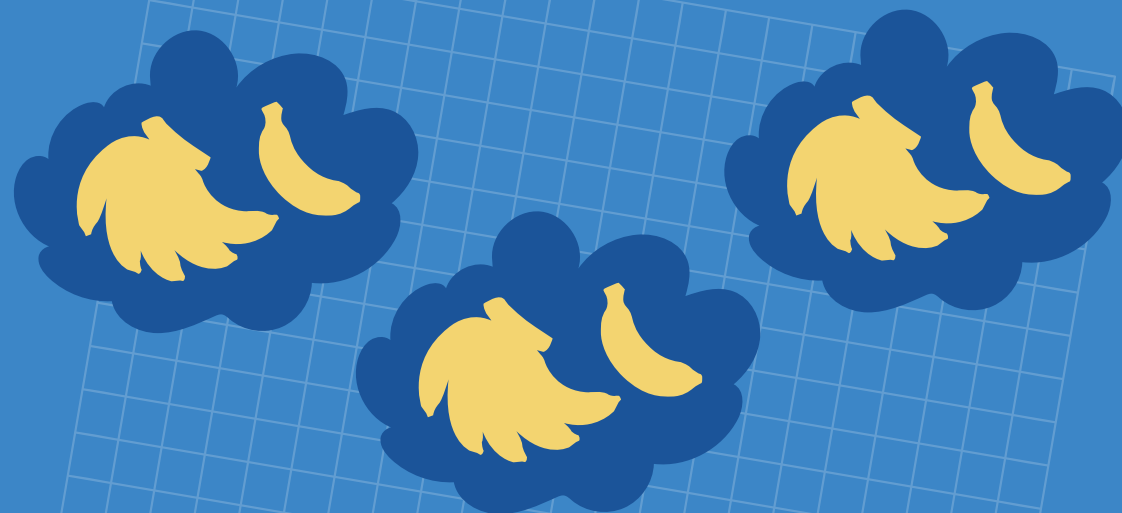
Draw one game card.



Ask the child to choose the respective quantity of bananas of the first number as a group of bananas.



Then, choose the respective quantity of groups of the second number. Ask your child to count the total number of bananas.



Want to ensure the correct answer?
Ask the Kong!

You can learn division with similar procedure. Division is the reverse operation of multiplication. Remember to encourage your child for his/ her great work by saying, "Well done".