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# He Rautaki Tāpiritanga, Tangohanga Hoki: Ngā Tau Tapeke Māmā o te Rua Tekau

E ako ana ahau i ngā tau tapeke māmā mō te rua tekau.

## Hei Mahi 1:

### Ngā tohutohu:

Ko te **20** te tapeke o ētahi o ēnei tāpiritanga. He tau māmā te **20**. Tuhia ngā tāpiritanga ko te **20** te tapeke.

- |                   |                    |                     |
|-------------------|--------------------|---------------------|
| 1) <b>14 + 6</b>  | (2) <b>3 + 17</b>  | (3) <b>5 + 13</b>   |
| 4) <b>16 + 5</b>  | (5) <b>11 + 9</b>  | (6) <b>6 + 12</b>   |
| 7) <b>14 + 3</b>  | (8) <b>10 + 10</b> | (9) <b>9 + 12</b>   |
| 10) <b>1 + 19</b> | (11) <b>14 + 7</b> | (12) <b>13 + 7</b>  |
| 13) <b>12 + 9</b> | (14) <b>18 + 2</b> | (15) <b>14 + 8</b>  |
| 16) <b>20 + 0</b> | (17) <b>6 + 15</b> | (18) <b>7 + 13</b>  |
| 19) <b>9 + 8</b>  | (20) <b>15 + 6</b> | (21) <b>11 + 12</b> |

### Ngā tohutohu:

Tuhia ēnei tāpiritanga, me te tohu anō mēnā e TIKA ana, e HĒ ana rānei te tāpiritanga.

- |   |                         |                          |
|---|-------------------------|--------------------------|
| 22) <b>5 + 16 = 20</b>  | (23) <b>11 + 9 = 20</b> | (24) <b>15 + 7 = 20</b>  |
| 25) <b>8 + 12 = 20</b>  | (26) <b>5 + 15 = 20</b> | (27) <b>7 + 9 = 20</b>   |
| 28) <b>16 + 4 = 20</b>  | (29) <b>8 + 13 = 20</b> | (30) <b>10 + 10 = 20</b> |
| 31) <b>2 + 19 = 20</b>  | (32) <b>11 + 7 = 20</b> | (33) <b>18 + 2 = 20</b>  |
| 34) <b>13 + 7 = 20</b>  | (35) <b>6 + 14 = 20</b> | (36) <b>3 + 16 = 20</b>  |
| 37) Kāore ētahi o ngā tāpiritanga 22 ki te 36 i runga nei i eke ki te <b>20</b> te tapeke. He aha tētahi rautaki e tere mōhio ai koe mēnā i eke ki te <b>20</b> , kāore rānei. Whakawhitiwhiti kōrero me tō kaiako. |                         |                          |

Kua tuhia te tapeke o ēnei tāpiritanga i te tīmatanga. Māu e tuhi ngā tāpiritanga ki tō pukapuka, me te tohu anō mēnā e TIKA ana, e HĒ ana rānei.

38)  $20 = 3 + 17$

(39)  $20 = 6 + 16$

(40)  $20 = 9 + 11$

41)  $20 = 4 + 16$

(42)  $20 = 14 + 5$

(43)  $20 = 0 + 20$

44)  $20 = 7 + 13$

(45)  $20 = 12 + 9$

(46)  $20 = 1 + 19$

## Hei Mahi 2:

### Ngā tohutohu:

He nui ake i te **20**, he ūrite ki te **20**, he iti iho rānei i te **20** ngā tāpiritanga e whai ake nei. Tuhia ngā tāpiritanga me te tohu e tika ana, ara, te <, te =, te > rānei.

1)  $6 + 12$     20

(2)  $3 + 18$     20

(3)  $9 + 7$     20

4)  $5 + 15$     20

(5)  $2 + 18$     20

(6)  $6 + 17$     20

7)  $7 + 15$     20

(8)  $19 + 1$     20

(9)  $7 + 12$     20

10)  $16 + 4$     20

(11)  $13 + 6$     20

(12)  $7 + 13$     20

13)  $17 + 6$     20

(14)  $15 + 5$     20

(15)  $0 + 20$     20

Kua tuhia te tapeke (**20**) o ēnei tāpiritanga i te tīmatanga. Māu e tuhi ngā tāpiritanga ki tō pukapuka me te tohu e tika ana, arā, ko te <, te =, te > rānei.

16) 20     $14 + 9$

(17) 20     $12 + 5$

(18) 20     $8 + 12$

19) 20     $10 + 10$

(20) 20     $9 + 9$

(21) 20     $11 + 10$

22) 20     $0 + 19$

(23) 20     $6 + 12$

(24) 20     $18 + 2$

25) 20     $7 + 13$

(26) 20     $9 + 13$

(27) 20     $5 + 13$

28) 20     $5 + 18$

(29) 20     $6 + 14$

(30) 20     $20 + 0$

- 31) E mōhio ana a Mātene i ana meka tāpiritanga matua ki te **10**, arā, ngā tāpiritanga pēnei i te  $7 + 3 = 10$  me te  $4 + 5 = 9$ . He āwhina nui tēnei hei tuhi māna i te tohu e tika ana ki ngā tāpiritanga i runga ake nei. He aha ai? Whakawhitihiti kōrero me tō kaiako.

## **Hei Mahi 3**

### **Ngā tohutohu:**

Tuhia te tau e tika ana ki te pouaka, kia tika ai te tāpiritanga. Tuhia te katoa o te tāpiritanga ki tō pukapuka.

- |                         |                          |                               |
|-------------------------|--------------------------|-------------------------------|
| 1) $9 + \square = 20$   | (2) $15 + \square = 20$  | (3) $1 + \square = 20$        |
| 4) $18 + \square = 20$  | (5) $\square + 8 = 20$   | (6) $17 + \square = 20$       |
| 7) $\square + 1 = 20$   | (8) $6 + 14 = \square$   | (9) $\square + 7 = 20$        |
| 10) $20 + \square = 20$ | (11) $\square + 2 = 20$  | (12) $15 + 5 = \square$       |
| 13) $7 + \square = 20$  | (14) $3 + 17 = \square$  | (15) $\square + 0 = 20$       |
| 16) $14 + \square = 20$ | (17) $\square + 18 = 20$ | (18) $\square + \square = 20$ |

## **Hei Mahi 4**

- 1)  $\square + \triangle = 20$  Ko te tikanga o tēnei rerenga kōrero e mea ana, e rua ngā tau e tāpirihia ana, ā, ko te **20** te tapeke. Tuhia ngā tau tāpiri takirua katoa e taea ana.
- 2) E tika ana kia ōrite te tau ka tuhia ki ngā pouaka e rua o tēnei tāpiritanga:  $\square + \square = 10$ . Ka taea te tuhi hei whakareatanga:  $2 \times \square = 10$ . He whakareatanga hoki tēnei:  $2\square = 10$   
Tuhia ēnei tāpiritanga hei whakareatanga:
- |  |   |  |
|--|---|--|
| (a) $\square + \square = 20$           | (e) $\square + \square = 40$            | (h) $\square + \square = 60$                     |
| (i) $\square + \square = 30$           | (k) $\square + \square = 50$            | (m) $\square + \square = 70$                     |
| (n) $\square + \square + \square = 30$ | (ng) $\square + \square + \square = 60$ | (o) $\square + \square + \square + \square = 40$ |
- 3) Tuhia ēnei whakareatanga hei tāpiritanga:
- |                     |                      |                     |
|---------------------|----------------------|---------------------|
| (a) $2\square = 10$ | (e) $2\square = 20$  | (h) $2\square = 60$ |
| (i) $2\square = 30$ | (k) $2\square = 50$  | (m) $3\square = 30$ |
| (n) $5\square = 50$ | (ng) $3\square = 60$ | (o) $4\square = 40$ |

## **Hei Mahi 5**

### **Ngā tohutohu:**

Tuhia te tau e tika ana ki te pouaka kia tika ai te tangohanga. Tuhia te katoa o te tangohanga ki tō pukapuka.

- |                        |                         |                         |
|------------------------|-------------------------|-------------------------|
| 1) $20 - 1 = \square$  | (2) $20 - \square = 18$ | (3) $20 - 19 = \square$ |
| 4) $20 - \square = 7$  | (5) $20 - \square = 5$  | (6) $20 - 4 = \square$  |
| 7) $20 - \square = 16$ | (8) $20 - \square = 12$ | (9) $20 - 6 = \square$  |
| 10) $\square - 15 = 5$ | (11) $20 - \square = 7$ | (12) $\square - 9 = 11$ |

### **Ngā tohutohu:**

Tuhia ēnei tangohanga, ka tohu ai mēnā e TIKA ana, e HĒ ana rānei.

- |  |                    |                    |
|--|--------------------|--------------------|
| 13) $20 - 1 = 18$  | (14) $20 - 5 = 15$ | (15) $20 - 12 = 9$ |
| 16) $20 - 14 = 6$  | (17) $20 - 7 = 12$ | (18) $20 - 6 = 14$ |
| 19) $20 - 13 = 6$  | (20) $20 - 8 = 12$ | (21) $20 - 3 = 17$ |
| 22)    He meka tāpiritanga te <b>19 + 1 = 20</b> . E taea ana te huri hei tangohanga. E rua ngā tangohanga e hāngai ana, arā, ko te $20 - 1 = 19$ me te $20 - 19 = 1$ . Tuhia ētahi meka tāpiritanga e ono mō te <b>20</b> , me ngā tangohanga e rua e hāngai ana ki tēnā me tēnā o ngā tāpiritanga. |                    |                    |

## **Hei Mahi 6**

### **Ngā tohutohu:**

Hurihia ēnei tangohanga hei tāpiritanga.

- |              |                |               |
|--------------|----------------|---------------|
| 1) $20 - 10$ | (2) $20 - 5$   | (3) $20 - 8$  |
| 4) $20 - 6$  | (5) $20 - 19$  | (6) $20 - 15$ |
| 7) $20 - 13$ | (8) $20 - 2$   | (9) $20 - 9$  |
| 10) $20 - 7$ | (11) $20 - 16$ | (12) $20 - 1$ |
- 13) Tuhia ngā otinga ki ngā tangohanga **1** ki te **12**.
- 14) He aha te take e hurihia ai tētahi tangohanga hei tāpiritanga? Whakawhitihiti kōrero me tō kaiako.

## **Hei Mahi 7**

### **What to do**

Tuhia te tāpiritanga, te tangohanga rānei o ia rapanga i raro iho nei. Ko ēhea ngā rapanga he māmā te whakaoti mēnā e mōhio ana koe ki ngā tau tapeke māmā o te 20.

- 1) E 20 ngā ‘peke whetū’ hei whakaoti mā Hinerau i tana mahi whakapakari tinana. Mēnā 12 kua oti, e hia e toe mai ana?
- 2) E 8 ngā pihikete ka kainga e te kurī a Wiremu i ia ata. 15 ka kainga e te kurī a tōna hoa. E hia katoa ngā pihikete ka kainga e ngā kurī e rua nei?
- 3) E 9 ngā kāri a Roimata, 11 ā Taika. E hia katoa ā rāua kāri?
- 4) E tākaro poitarawhititi ana te kura o Awahou me te kura o Hiwirosa. I te wā haurua, ko te 25 ki te 15 te kaute, ko Awahou kei mua. E hia ngā piro kei waengau i ngā tīma e rua nei?
- 5) 17 ngā kuku i kohia e Whaiora, 13 i kohia e Matewai. E hia katoa ā rāua kuku?
- 6) 17 ngā māpere a Hirere. E 3 te nuinga ake i tēnā, ngā māpere a Aroha. E hia katoa ā rāua māpere?
- 7) Kei te tuku ī mera a Kui ki āna mokopuna 20. Kua tukuna ngā ī mera 11. E hia kei te toe hei tuku māna?
- 8) E 9 ngā āporo i katoa e Hirini. E 2 te nuinga ake i tēnei, ngā āporo i katoa e Ellie. E hia katoa ā rāua āporo?
- 9) Kei te hiahia a Whaea Wini ki te hoatu tātaitai ki āna ākonga katoa. E 20 āna ākonga, e 8 āna tātaitai. E hia atu anō ngā tātaitai hei kimi māna?
- 10) E 20 katoa ngā pene a ngā tamariki tokotoru nei. E 7 ā Kiri, e 8 ā Pua. E hia ngā pene a Hirini?
- 11) E 7 ngā ārani, e 6 ngā panana, e 9 ngā āporo kei roto i te paepae. E hia katoa ngā hua rākau nei?
- 12) 18 ngā kēmu i toa ai te tīma poiwhana o Matiu. E 2 te nuinga ake i tēnei, i toa ai te tīma o Rāwiri. E hia katoa ngā kēmu i toa ai ngā tīma e rua nei?

## **Hei Mahi 8**

### **Ngā tohutohu:**

Tuhia te tāpiritanga te tangohanga rānei o ia rapanga, ka whakaoti ai. Ko ēhea ngā rapanga e taea ana te whakaoti mā te whakamahi i ngā tau tapeke māmā o te 10?

- 1) He kohikohi pōro hahau te mahi a Hāmi rāua ko Rangi. Kia eke ki te 50 ngā pōro ka kohia e rāua, mā te pāpā o Hāmi e hoatu te \$10. E 30 ngā pōro kua kohia e Hāmi, e 20 kua kohia e Rangi. Ka riro i a rāua te \$10, kāore rānei?

- 2) He kohikohi pōro hahau hoki te mahi a Ana rāua ko Hera. E 41 ngā pōro kua kohia e Ana, e 7 kua kohia e Hera. Ka riro i a rāua te \$10?
- 3) I tētahi Rāhoroi, ka whakakotahitia ngā pōro i kohia e rātou katoa, arā, ngā pōro 10 i kohia e Hāmi, ngā pōro 25 a Rangi, ngā pōro 15 a Ana me ngā pōro 10 a Hera. E hia ngā moni ka riro i a rāua?
- 4) E 35 ngā pōro hahau kua kohia e Hāre. E hia atu anō hei kohi māna kia riro i a ia te \$10?
- 5) Kua kainga ngā tiakareti 31 o ngā tiakareti 40 i tētahi pouaka. E hia ngā tiakareti e toe mai ana?
- 6) E 47 ngā kau a Tame hei miraka māna 13 ngā kau a Hine. E hia katoa ā rāua kau?
- 7) Kei te tunu pihikete a Kui. E 24 ngā pihikete i tunua i te ata, 16 i tunua i te ahiahi. E hia katoa ngā pihikete nā Kui i tunu?
- 8) E 70 ngā pireppire a Mihi. E 25 he kahurangi, e 30 he kākāriki, ko te toenga he pango. E hia āna pireppire pango?
- 9) E 70 meneti te wā i omaoma ai a Hinehou i te roanga atu o ētahi rangi e 4. E 20 meneti i te rā tuatahi. E 20 meneti anō i te rā tuarua. 18 meneti i te rā tuatoru. E hia meneti te roa o te omaoma a Hinehou i te rā tuawhā?
- 10) E 90 katoa ngā ākonga. E 69 e ako ana i te kaupapa Toi, ko te toenga e ako ana i te kaupapa Hangarau. Tokohia e ako ana i te Hangarau?

### **Exercise 9**

- 1)  $a + e = 20$  He rerekē ngā tau e tohua ana e te 'a' me te 'e' i tēnei tāpiritanga.  
Tuhia ngā tau takirua katoa e taea ana, kia eke ki te **20** te tapeke.

# Ngā Otinga

## Hei Mahi 1

Koia nei ngā tāpiritanga ko te 20 te tapeke: 1, 2, 5, 8, 10, 12, 14, 16, 18

- |     |                                     |      |      |      |      |      |      |
|-----|-------------------------------------|------|------|------|------|------|------|
| 22) | Hē                                  | (23) | Tika | (24) | Hē   |      |      |
| 25) | Tika                                | (26) | Tika | (27) | Hē   | (28) | Tika |
| 29) | Hē                                  | (30) | Tika | (31) | Hē   | (32) | Hē   |
| 33) | Tika                                | (34) | Tika | (35) | Tika | (36) | Hē   |
| 37) | Whakawhitihiti kōrero me tō kaiako. |      |      |      |      |      |      |
| 38) | Tika                                | (39) | Hē   | (40) | Tika | (41) | Tika |
| 42) | Hē                                  | (43) | Tika | (44) | Tika | (45) | Hē   |
| 46) | Tika                                |      |      |      |      |      |      |

## Hei Mahi 2

- |     |                                     |      |   |      |   |      |   |
|-----|-------------------------------------|------|---|------|---|------|---|
| 1)  | <                                   | (2)  | > | (3)  | < | (4)  | = |
| 5)  | =                                   | (6)  | > | (7)  | > | (8)  | = |
| 9)  | <                                   | (10) | = | (11) | < | (12) | = |
| 13) | >                                   | (14) | = | (15) | = | (16) | < |
| 17) | >                                   | (18) | = | (19) | = | (20) | > |
| 21) | <                                   | (22) | > | (23) | > | (24) | = |
| 25) | =                                   | (26) | < | (27) | > | (28) | < |
| 29) | =                                   | (30) | = |      |   |      |   |
| 31) | Whakawhitihiti kōrero me tō kaiako. |      |   |      |   |      |   |

## Hei Mahi 3

- |    |                |      |               |      |                |      |                |
|----|----------------|------|---------------|------|----------------|------|----------------|
| 1) | $\square = 11$ | (2)  | $\square = 5$ | (3)  | $\square = 19$ | (4)  | $\square = 2$  |
| 5) | $\square = 12$ | (6)  | $\square = 3$ | (7)  | $\square = 19$ | (8)  | $\square = 20$ |
| 9) | $\square = 13$ | (10) | $\square = 0$ | (11) | $\square = 18$ | (12) | $\square = 20$ |

13)  $\square = 13$       (14)  $\square = 20$       (15)  $\square = 20$       (16)  $\square = 6$

17)  $\square = 2$       (18)  $\square = 10$

### Hei Mahi 4

1)  $0 + 20$      $1 + 19$      $2 + 18$      $3 + 17$      $4 + 16$      $5 + 15$      $6 + 14$      $7 + 13$      $8 + 12$   
 $9 + 11$      $10 + 10$      $11 + 9$      $12 + 8$      $13 + 7$      $14 + 6$      $15 + 5$      $16 + 4$      $17 + 3$   
 $18 + 2$      $19 + 1$      $20 + 0$

2 a)  $2\square = 20$       (e)  $2\square = 40$       (h)  $2\square = 60$

i)  $2\square = 30$       (k)  $2\square = 50$       (m)  $2\square = 70$

n)  $3\square = 30$       (ng)  $3\square = 60$       (o)  $4\square = 40$

3 a)  $\square + \square = 10$       (e)  $\square + \square = 20$       (h)  $\square + \square = 60$

i)  $\square + \square = 30$       (k)  $\square + \square = 50$       (m)  $\square + \square + \square = 30$

n)  $\square + \square \square + \square + \square = 50$       (ng)  $\square + \square + \square = 60$       (o)  $\square + \square + \square + \square = 40$

### Hei Mahi 5

1)  $20 - 1 = 19$       (2)  $20 - 2 = 18$       (3)  $20 - 19 = 1$

4)  $20 - 13 = 7$       (5)  $20 - 15 = 5$       (6)  $20 - 4 = 16$

7)  $20 - 4 = 16$       (8)  $20 - 8 = 12$       (9)  $20 - 6 = 14$

10)  $20 - 15 = 5$       (11)  $20 - 13 = 7$       (12)  $20 - 9 = 11$

13) Hē      (14) Tika      (15) Hē

16) Tika      (17) Hē      (18) Tika

19) Hē      (20) Tika      (21) Tika

22) Whakawhitihiti kōrero me tō kaiako.

### Hei Mahi 6

1)  $10 + \square = 20$       (2)  $5 + \square = 20$       (3)  $8 + \square = 20$       (4)  $6 + \square = 20$

5)  $19 + \square = 20$       (6)  $15 + \square = 20$       (7)  $13 + \square = 20$       (8)  $2 + \square = 20$

9)  $9 + \square = 20$       (10)  $7 + \square = 20$       (11)  $16 + \square = 20$       (12)  $1 + \square = 20$

13) 10, 15, 12, 14, 1, 5, 7, 18, 11, 13, 4, 19

14) Whakawhitihiti kōrero me tō kaiako.

## Hei Mahi 7

- |     |   |   |
|-----|---|---|
| 1)  | $20 - 12$ or $20 - 12 = \square$ or $12 + \square = 20$ | tapeke māmā: 20                               |
| 2)  | $8 + 15$ or $8 + 15 = \square$                          | Kāore e eke ki te 20. Ehara i te tapeke māmā. |
| 3)  | $9 + 11$ or $9 + 11 = \square$                          | tapeke māmā: 20                               |
| 4)  | $25 - 15$ or $25 - 15 = \square$ or $15 + \square = 25$ | Kāore e eke ki te 20. Ehara i te tapeke māmā. |
| 5)  | $17 + 13$ or $17 + 13 = \square$                        | tapeke māmā: 30                               |
| 6)  | $17 + 3 = 20$ , $17 + 20 = \square$                     | tapeke māmā: 20 (wāhanga tuatahi)             |
| 7)  | $20 - 11$ or $20 - 11 = \square$ or $11 + \square = 20$ | tapeke māmā: 20                               |
| 8)  | $9 + 2 = 11$ , $9 + 11 = \square$                       | tapeke māmā: 20 (wāhanga tuarua)              |
| 9)  | $20 - 8$ or $20 - 8 = \square$ or $8 + \square = 20$    | tapeke māmā: 20                               |
| 10) | $7 + 8 + \square = 20$ or $20 - 8 - 7 = \square$        | tapeke māmā: 20                               |
| 11) | $7 + 6 + 9$ or $7 + 6 + 9 = \square$                    | Kāore e eke ki te 20. Ehara i te tapeke māmā. |
| 12) | $18 + 2 = 20$ , $20 + 18 = \square$                     | tapeke māmā: 20 (wāhanga tuatahi)             |

## Hei Mahi 8

- |    |  |                               |   |
|----|--|-------------------------------|---|
| 1) | $30 + 20 = 50$ , āe, ka riro i a rāua te \$10        |                               |   |
| 2) | $41 + 7 < 50$ , kāore e riro i a rāua te \$10        |                               |   |
| 3) | $10 + 25 + 15 + 10 = 60$ , ka riro i a rātou te \$10 |                               |   |
| 4) | $50 - 35$  | $50 - 35 = \square$           | $35 + \square = 50$ Nō reira, 15 atu anō hei kohi māna.                                   |
| 5) | $40 - 31$  | $40 - 31 = \square$           | $31 + \square = 40$ Nō reira, e 9 e toe mai ana.  |
| 6) | $47 + 13$  | $47 + 13 = \square$           | Nō reira, e 60 katoa ngā kau.   |
| 7) | $24 + 16$  | $24 + 16 = \square$           | Nō reira, e 40 ngā pihikete a Kui.  |
| 8) | $70 - 25 - 30$                                       | $70 - 25 - 30 = \square$      | $\square + 25 + 30 = 70$ Nō reira, 15 ngā pireppire pango.                                |
| 9) | $70 - 20 - 20 - 18$                                  | $70 - 20 - 20 - 18 = \square$ | $20 + 20 + 18 + \square = 70$<br>Nō reira, 12 meneti te roa o tana omaoma i te rā tuawhā. |

10)     $90 - 69 = \square$      $69 + \square = 90$     Nō reira, e 21 ngā ākonga e ako ana i te  
Hangarau

### **Hei Mahi 9**

Tirohia te otinga o Hei Mahi 4, Nama 1