Young Lives

Mathematics
ITEM BANK

R5 ETHIOPIA

Respondent Information

Names and Surnames: _____

Child ID: ET ___ ___ ___ ___ ___ ___

General Data
(To be filled by fieldworker)

Fieldworker's name: _____

Fieldworker's code: ___

Location: _____

Date (dd/mm/yy): ___ /___ /___

Start time: _____ : _____   Finish time: _____ : _____

INSTRUCTIONS

- Read each question carefully and answer the best you can.
- If you take too long on a question, go to the next one. When you finish you can go back to the ones you haven't answered.
- Remember to mark all your answers in the booklet.
- In each question there is only one correct answer.
- You may use the extra space on the side to make your calculations.
- You will have up to 50 minutes to answer these questions.

You will find several types of questions in the booklet.
Let´s take a look:

Question 1

There are questions in which you will have to solve the exercise and then write the correct answer in the blank space.

Example:

Solve the exercise and write the correct answer in the blank space.

1 + 1 = | 2 | *1+ 1 = 2*

Question 2

There are questions in which you will have to solve the exercise and then mark the option that has the correct answer with an X.

Example:

Solve 2 + 2. Mark with an X the correct answer.

a. 2 ☐

b. 3 ☐

c. 4 ☒   *2+ 2 = 4*

d. 5 ☐

Question 3

Finally, there are questions where you have to read carefully a math problem, solve it and then mark the correct answer with an X.

Example:

Abeyot and Tirsit bought pencils. Abeyot bought 1 pencil and Tirsit bought 2. How many pencils do they have between the both of them?

a. 3 pencils ☒

b. 2 pencils ☐

c. 5 pencils ☐

d. 1 pencil ☐

$1 + 2 = 3$

STOP, WAIT DIRECTIONS TO BEGIN.

Write the correct answer in the space:

1. 8 − 3 =

2. 112 + 45 + 467 =

3. 48 x 5 =

4. 52 − 7 =

5. 45 ÷ 15 =

6. 9.81 + 7.62 =

7. 18.23 - 0.2 =

8. 9/8 X 2/3 =

9. 25% of 240 =

11. One year a company reported selling [1426 tons] of fertilizer. The following year the company sold 15% less fertilizer. Which is the closest approximation to the number of [tons] of fertilizer sold in the second year?

a. 200

b. 1200

c. 300

d. 1600

13. [Maria] has 6 red boxes. Each box has 4 pencils inside. She also has 3 blue boxes. Each blue box has 2 pencils inside. How many pencils does [Maria] have altogether?

a.   36
b.   15
c.   24
d.   30

16. In a school there were 1200 students (boys and girls). A sample of 100 students was selected at random, and 45 boys were found in the sample. Which of these is most likely to be the number of boys in the school?

a. 450 ☐

b. 500 ☐

c. 540 ☐

d. 600 ☐

17. Tickets for a train cost either 10 [dollars], 15 [dollars], or 30 [dollars]. Of the 900 tickets sold, 1/5 cost 30 [dollars] each and 2/3 cost 15 [dollars] each. What fraction of the train tickets was sold for 10 [dollars] each?

a. 2/15 ☐

b. 1/15 ☐

c. 12/15 ☐

d. 6/15 ☐

Below is a receipt that [Oscar] received after making a purchase in a cloth shop. There are some blank spaces in the receipt where information is missing. Read carefully.

[Kathy´s] Shop

RECEIPT N° 0568

Date: [October 4th, 2012]

[

No. of items	DESCRIPTION	UNIT PRICE	LINE TOTAL	DISCOUNT
10	Trousers	[$12]	[$ 120]	[$ 24]
25	T-shirts	[$ 13]	[$ 325]	No discount
78	Socks	[$ 4]	[$ 312]	[$ 35]
37	Dresses	[$ 20]	[$740]	No discount
49	Skirts	[$ 8]	[$392]	[$ 33]
			SUBTOTAL	**[$ 92]** TOTAL DISCOUNT
			TOTAL	

18. Based on the receipt, answer the following questions by marking the correct answer with an X.

How many items did [Oscar] buy?

      a. 199 ☐

      b. 209 ☐

      c. 198 ☐

      d. 208 ☐

19. [Andrea] wants to buy 38 T-shirts. How much will she pay?

      a. [$ 325] ☐

      b. [$ 494] ☐

      c. [$ 484] ☐

      d. [$ 304] ☐

Below is a medicine description. Read it carefully.

Each box **costs** **[$15]**

[CIPIRINA]

INGREDIENTS: Each tablet contains 500 mg *acetaminophen* acid

DOSAGE: ORAL. 1 or 2 tablets every 4 hours, preferably accompanied by food, for not longer than 28 days. In the case of children, only 1 tablet every 8 hours for not longer than 10 days.

INDICATIONS: [Cipirina] is often used to relieve different symptoms. This medication relieves mild to moderate pain in the muscles of the hands and legs. It reduces fever, bone pain and menstrual symptoms.

CAUTION: [Cipirina] may cause drowsiness, gastric pain, allergies or ulcers. Children up to 10 years with chicken pox and asthma should consult with their doctor before taking this medicine.

Based on the text, answer the following questions by marking the correct answer with an X.

20. According to the description, how many tablets can a child take in one day?

a. 2 tablets ☐

b. 1 tablet ☐

c. 3 tablets ☐

d. 8 tablets ☐

21. If [Arturo] takes the largest amount of pills recommended for adults, how many more pills can he take compared with a child in two days?

a. [Arturo] can take 18 pills more than a child ☐

b. [Arturo] can take 3 pills more than a child ☐

c. [Arturo] can take 9 pills more than a child ☐

d. [Arturo] can take 7 pills more than a child ☐

22. [Ana's] doctor tells her to take 2 tablets every 12 hours for a week. How many mg of acetaminophen will [Ana] have taken in total by the end of the week?

a. 14 000 mg ☐

b. 7 000 mg ☐

c. 21 000 mg ☐

d. 12 000 mg ☐

23. [Mario] wants to buy 7 boxes. When he was going to pay the cashier told him that there was a 25% discount on the tablets he was buying. Which mathematical operation(s) is (are) needed to get the amount of money he paid for his medicine?

a. Only multiplication ☐

☐

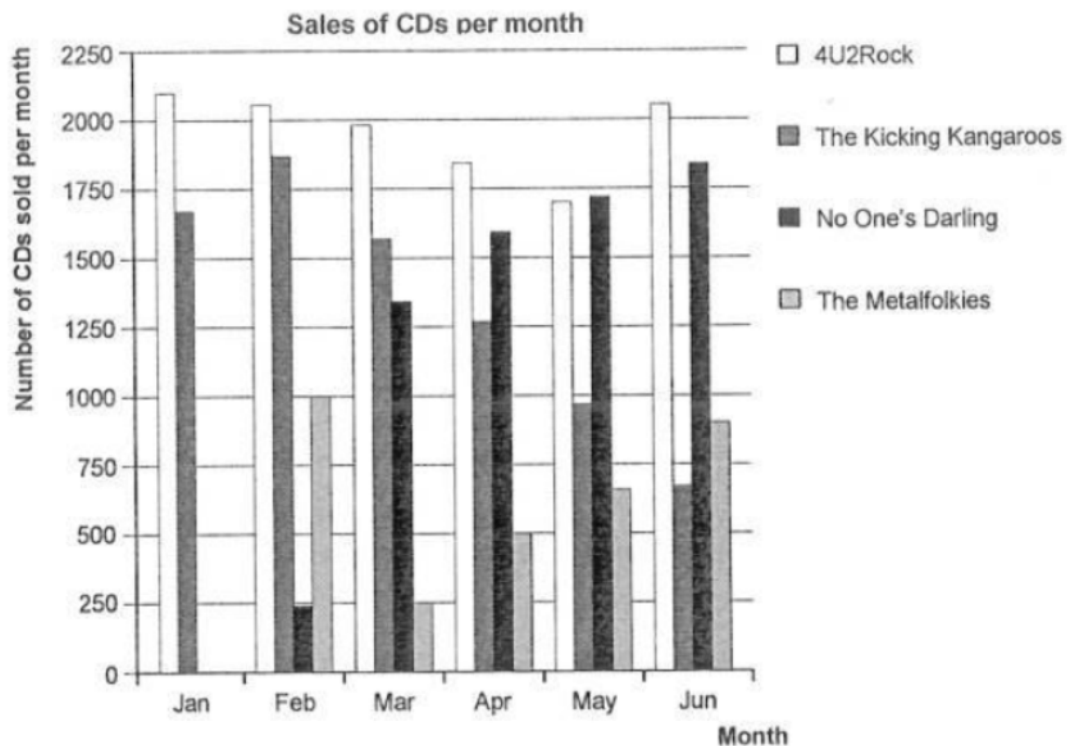b. Multiplication, division and subtraction

c. Division and multiplication

d. Addition and subtraction

CHARTS

In January, the new CDs of the bands *4U2Rock* and *The Kicking Kangaroos* were released. In February, the CDs of the bands *No One's Darling* and *The Metalfolkies* followed. The following graph shows the sales of the bands' CDs from January to June.

Sales of CDs per month

- □ 4U2Rock
- ▨ The Kicking Kangaroos
- ■ No One's Darling
- ☐ The Metalfolkies

(Y-axis: Number of CDs sold per month; X-axis: Month — Jan, Feb, Mar, Apr, May, Jun)

24. How many CDs did the band The Metalfolkies sell in April?

A. 250
B. 500
C. 1000
D. 1270

25. In Which month did the band NO One's Darling sell more CDs than the ban The Kicking Kangaroos for the first time?

A. No month
B. March
C. April
D. May

26. The manager of The Kicking Kangaroos is worried because the number of their CDs that sold decreased from February to June.

What is the estimate of their sales volume for July if the same negative trend continues

    A. 70 CDs
    B. 370 CDs
    C. 670 CDs
    D. 1340 CDs

HELEN THE CYCLIST

Helen has just got a new bike. It has a speedometer which sits on the handlebar.

The speedometer can tell Helen the distance she travels and her average speed for a trip.

27. On one trip, Helen rode 4km in the first 10 minutes and then 2 km in the next 5 minutes. Which one of the following statements is correct?

    A. Helen's average speed was greater in the first 10 minutes than in the next 5 minutes.
    B. Helen's average speed was the same in the first 10 minutes and in the next 5 minutes.
    C. Helen's average speed was less in the first 10 minutes than in the next 5 minutes.
    D. It is not possible to tell anything about Helen's average speed from the information given.

28. Helen rode 6 km to her aunt's house. Her speedometer showed that she had averaged 18 km/h for the whole trip. Which one of the following statements is correct?

A. It took Helen 20 minutes to get her aunt's house.
B. It took Helen 30 minutes to get her aunt's house.
C. It took Helen 3 hours to get her aunt's house.
D. It is not possible to tell how long it took Helen to get to her aunt's house.

29. Helen rode her bike from home to the river, which is 4 km away. It took her 9 minutes. She rode home using a shorter route of 3km. this only took her 6 minutes. What is Helens average, speed, in km/h, for the trip to the river and back?

Average speed for the trip:……………………….km/h

WHICH CAR?

Chris has just received her car driving licence and wants to buy her first car.

This table below shows the details of four cars she finds at a local car dealer.

Model:	Alpha	Bolte	Castel	Dezal
Year	2003	2000	2001	1999
Advertised price (zeds)	4800	4450	4250	3990
Distance travelled (kilometres)	105 000	115 000	128 000	109 000
Engine capacity (litres)	1.79	1.796	1.82	1.783

Chris wants a car that meets all these conditions:

- The distance travelled is not higher than 120 000 kilometers.
- It was made in the year 2000 or a later year.
- The advertised price is not higher than 4500 zeds.

30. Which car meets Chris conditions?

A. Alpha
B. Bolte
C. Castel
D. Dezal