Functional Independence
Fall 2010
Mathematics

Item Descriptors

Grade 7

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DIRECTIONS: Read each question. Choose the BEST answer for each question.
**NOTE:** For each item listed throughout this booklet, the first statement is a summary of the Michigan Extended Grade Level Content Expectation (EGLCE) and the second statement or problem is the descriptor for the item’s stem or question.

<table>
<thead>
<tr>
<th>1</th>
<th><strong>N.MR.06.FI.EG06:</strong> Find the next number in a simple repeating pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Describe skip-counting pattern</td>
</tr>
<tr>
<td>A</td>
<td>added half of correct value</td>
</tr>
<tr>
<td>B</td>
<td>correct</td>
</tr>
<tr>
<td>C</td>
<td>added first number in pattern</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2</th>
<th><strong>N.MR.06.FI.EG06:</strong> Find the next number in a simple repeating pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Identify pattern that matches given description</td>
</tr>
<tr>
<td>A</td>
<td>increasing by given value, instead of decreasing</td>
</tr>
<tr>
<td>B</td>
<td>increasing and decreasing</td>
</tr>
<tr>
<td>C</td>
<td>correct</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3</th>
<th><strong>N.MR.06.FI.EG05:</strong> Create, describe, and extend simple number patterns</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Describe skip-counting pattern</td>
</tr>
<tr>
<td>A</td>
<td>incorrect pattern</td>
</tr>
<tr>
<td>B</td>
<td>correct</td>
</tr>
<tr>
<td>C</td>
<td>incorrect pattern</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4</th>
<th><strong>M.UN.06.FI.EG02:</strong> Select units of measure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Select unit of measure for volume</td>
</tr>
<tr>
<td>A</td>
<td>unit of measure for length</td>
</tr>
<tr>
<td>B</td>
<td>unit of measure for temperature</td>
</tr>
<tr>
<td>C</td>
<td>correct</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5</th>
<th><strong>M.UN.06.FI.EG07:</strong> Tell time on a clock to the nearest hour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Identify clock displaying given time</td>
</tr>
<tr>
<td>A</td>
<td>correct</td>
</tr>
<tr>
<td>B</td>
<td>incorrect time</td>
</tr>
<tr>
<td>C</td>
<td>incorrect time</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6</th>
<th><strong>M.UN.06.FI.EG01:</strong> Use standard tools for measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Identify tool used to measure length</td>
</tr>
<tr>
<td>A</td>
<td>correct</td>
</tr>
<tr>
<td>B</td>
<td>tool used to measure temperature</td>
</tr>
<tr>
<td>C</td>
<td>tool used to measure volume</td>
</tr>
</tbody>
</table>
7 M.UN.06.FI.EG04: Measure lengths to the nearest half-inch
   Use ruler to measure length of rectangle
   A incorrect length
   B incorrect length
   C correct

8 M.UN.06.FI.EG08: Know equivalent calendar units
   Know number of days in a week
   A too few days
   B too few days
   C correct

9 G.LO.06.FI.EG01: Use relative position of objects on a plane and in space
   Describe relative position of two objects
   A incorrect position
   B correct
   C incorrect position

10 G.LO.06.FI.EG03: Read, interpret and use maps and grids
   Interpret map to determine general direction
   A opposite direction
   B correct
   C incorrect direction

11 G.LO.06.FI.EG03: Read, interpret and use maps and grids
   Interpret diagram to determine directional turns
   A correct
   B opposite turns
   C incorrect turns

12 M.UN.06.FI.EG07: Tell time on a clock to the nearest hour
   Tell time to nearest hour on an analog clock
   A minute hand = hour hand
   B correct
   C sum of minute hand and hour hand
13 **M.PS.06.FI.EG09:** Solve one-step word problems

Given time, find earlier time by given number of hours

A correct

B added, instead of subtracted

C incorrect subtraction

14 **M.PS.06.FI.EG09:** Solve one-step word problems

Given temperature and increase, calculate final temperature

A subtracted, instead of added

B starting temperature

C correct

15 **N.ME.06.FI.EG01:** Read, write and count using whole numbers to 10,000

Translate word form of number into standard form

A hundreds = tens

B correct

C transposed tens and ones

16 **N.ME.06.FI.EG04:** Compare and order numbers to 10,000

Determine number less than given number

A greater than given number

B greater than given number

C correct

17 **N.ME.06.FI.EG03:** Express numbers to 10,000 using place value

Translate expanded form of number into standard form

A correct

B tens = hundreds

C tens = hundreds

ones = tens

18 **N.ME.06.FI.EG03:** Express numbers to 10,000 using place value

Determine number in ones place of given number

A thousands place

B correct

C hundreds place
19 D.RE.06.FI.EG03: Describe the shape of data
   Describe data given in chart
   A incorrect trend
   B correct
   C incorrect trend

20 D.RE.06.FI.EG04: Solve problems using data
   Calculate total from chart
   A difference
   B 10 less than total
   C correct

21 D.RE.06.FI.EG01: Read data
   Match given bar graph to table
   A incorrect table
   B incorrect table
   C correct

22 N.FL.06.FI.EG07: Add and subtract one- and two-digit numbers
   Subtract two 2-digit numbers
   A correct
   B subtracted smaller values from larger values
   C 10 more than difference

23 N.MR.06.FI.EG09: Understand multiplication
   Match multiplication expression to diagram
   A correct
   B diagram for addition
   C diagram for addition

24 N.FL.06.FI.EG10: Multiplying numbers up to 5 x 5
   Multiply in word problem
   A subtracted
   B added
   C correct

25 N.MR.06.FI.EG09: Understand multiplication
   Match multiplication expression to array
   A correct
   B missing one column
   C extra row and extra column

26 N.MR.06.FI.EG08: Solve simple number sentences for +/−
   Add two 2-digit numbers
   A 10 less than sum
   B subtracted in ones place
   C correct
27 N.MR.06.FI.EG09: Understand multiplication

Given context, match to multiplication expression

A incorrect expression
B correct
C incorrect expression

28 N.FL.06.FI.EG14: Apply estimation

Estimate difference

A added
B overestimate
C correct

29 N.MR.06.FI.EG15: Select numbers to solve problems

Select number sentence to match word problem

A subtracted, instead of added
B subtracted (resulting in negative difference)
C correct

30 N.MR.06.FI.EG15: Select numbers to solve problems

Select number sentence to match word problem

A added one subtrahend
B correct
C added both subtrahends

31 N.MR.06.FI.EG16: Solve applied problems

Determine fraction to match given context

A correct
B ratio remaining instead of ratio taken
C incorrect fraction

32 M.PS.06.FI.EG11: Tell the amount of money in dollars and cents

Given photo of bills and coins, calculate total

A did not include all bills in total
B miscalculated total
C correct
33 **M.UN.06.FI.EG10:** Recognize equivalent sets of coins and bills

Identify matching set of coins given coins

- **A** correct
- **B** same set without 2 dimes
- **C** set needs one more dime

34 **M.PS.06.FI.EG12:** Add and subtract money in dollars and cents

Add money in dollars and cents

- **A** subtracted cents
- **B** incorrect addition with cents
- **C** correct

35 **M.PS.06.FI.EG11:** Tell the amount of money in dollars and cents

Given photo of coins, calculate total value

- **A** over by 10 cents
- **B** correct
- **C** dime is worth one cent