APPENDIX A
Sample Functional Independence Items

Fall 2007 and Spring 2008 Functional Independence Science Official Released Items

The following items were released to the public following the fall 2007 and spring 2008 administrations of the Functional Independence assessments. Released item booklets containing these items can be found on the MI-Access Web page at www.mi.gov/mi-access.

Released Items Grade 5

R1 What completes the life cycle of an insect?

Egg ➔ Larva ➔ Pupa ➔ ?

A Child
B Teen
C Adult

R2 The average American produces four pounds of trash a day.

What can Americans do to make less trash each day?

A build more landfills for trash
B dump trash in oceans
C recycle the trash
Sample Functional Independence Items

R3  Which is an inclined plane?

A  ramp
B  can opener
C  gear

R4  Jacob beats on a drum.

He beats the drum with more force.

What happens to the sound?

A  The sound becomes softer.
B  The sound becomes louder.
C  The sound has a higher pitch.
Sample Functional Independence Items

R5  Which was caused by erosion?

A  forest

B  grass

C  canyon
Sample Functional Independence Items

Use the chart below to answer question R6.

Three-Day Forecast

<table>
<thead>
<tr>
<th>Day</th>
<th>Weather</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>Sunny</td>
</tr>
<tr>
<td>Tuesday</td>
<td>Rainy</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Cloudy</td>
</tr>
</tbody>
</table>

**R6** On which day should you wear boots?

A  Monday

B  Tuesday

C  Wednesday
Sample Functional Independence Items

Released Items Grade 8

Use the picture below to answer question R1.

![Carrot Image]

**R1** What part of this plant is *usually* eaten?

A leaves

B stems

C root
Sample Functional Independence Items

R2  What is the relationship of a bird to a worm?

A  The bird is the predator of the worm.

B  The bird is the prey of the worm.

C  The bird and the worm help each other.

R3  Stan replaced the batteries in a radio.

The radio still does not work.

What information should Stan look at next?

A  the picture of how to place the batteries

B  the brand of the appliance

C  the brand of the batteries
Sample Functional Independence Items

**R4** What is an example of a chemical change?

A   a nail being hammered

B   a nail rusting

C   a nail being cut in half
Use the bar graph below to answer question **R5**.

**Daily Temperature**

<table>
<thead>
<tr>
<th>Day of the Week</th>
<th>Temperature (°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>20</td>
</tr>
<tr>
<td>Tuesday</td>
<td>20</td>
</tr>
<tr>
<td>Wednesday</td>
<td>25</td>
</tr>
<tr>
<td>Thursday</td>
<td>25</td>
</tr>
<tr>
<td>Friday</td>
<td>30</td>
</tr>
<tr>
<td>Saturday</td>
<td>30</td>
</tr>
<tr>
<td>Sunday</td>
<td>25</td>
</tr>
</tbody>
</table>

**R5** What type of clothing should be worn during the week shown in the graph?

- A shorts and T-shirt
- B gloves and winter coat
- C spring coat and pants
Sample Functional Independence Items

R6 What is the effect of Earth spinning on its axis?

A sun and moon

B night and day

C summer and winter
Sample Functional Independence Items

Spring 2008 Released Items Grade 11

R1 Which organism is a mammal?

A beaver

B iguana

C penguin
Sample Functional Independence Items

R2  Jeffery has a bacterial infection.

Which statement best describes the treatment for the infection?

A  Antibiotics will kill the bacteria.

B  Water will slow the bacteria.

C  Jeffery must stay in bed.

R3  The wolf population in a habitat increased.

What is the best explanation for why the local moose population decreased?

A  The wolves ate the moose.

B  The wolves’ howling scared away the moose.

C  The wolves chased the moose away.
Sample Functional Independence Items

R4 What happens to the boiling point of the mixture when salt is added to water?

A decreases

B increases

C stays the same
R5  The picture below shows charged particles.

Why does the small particle in the middle move towards the left?

A  Like charges attract.

B  Unlike charges repel.

C  Unlike charges attract.
Sample Functional Independence Items

Use the picture below to answer question R6.

R6 Why are the two light beams thinner at the bottom than at the top?

A The energy of the sun decreases during the day.
B Some energy is absorbed by the cloud and the air.
C None of the sun’s energy reaches Earth’s surface.
Sample Functional Independence Items

R7  Mining has both positive and negative effects.

What is one positive effect of sand mining?

A  Sand mining helps the economy by creating jobs.

B  Sand mining helps the water quality of the river.

C  Moving the sand helps plant and animal habitats.

R8  How does water flow from the Great Lakes to the ocean?

A  through a stream

B  through a river

C  through a wetland
Sample Functional Independence Items

R9  What is the safest thing for a person to do if trapped in a car by a blizzard?

A   open all the windows to let in fresh air

B   get out of the vehicle and walk to safety

C   stay inside the vehicle as long as possible