

Reading Components: Sample Word Meaning (Print Vocabulary) Items

For Word Meaning items, respondents are asked to circle the word that matches the picture.

Sample 1:



ear

egg

lip

jar

Sample 2:



shoulder

cloud

flower

flag

Sample 3:



sports

frog

father

spider

Sample 4:



fountain

stage

bridge

bottle

Reading Components: Sample Sentence Processing Items

For Sentence Processing items, respondents are asked to make a sensibility judgment about a sentence with respect to the real world or the internal logic of the sentence. The respondent reads the sentence and circles YES if the sentence makes sense or NO if the sentence does not make sense.

Sample Sentences:

Three girls ate the song.	YES	NO
The man drove the green car.	YES	NO
The lightest balloon floated in the bright sky.	YES	NO
A comfortable pillow is soft and rocky.	YES	NO
A person who is twenty years old is older than a person who is thirty years old.	YES	NO

Reading Components: Sample Passage Comprehension Items

For Passage Comprehension items, respondents are asked to read a passage and circle the word that makes the sentence make sense.

Sample Passage:

To the editor: Yesterday, it was announced that the cost of riding the bus will increase. The price will go up by twenty percent starting next wife / month. As someone who rides the bus every day, I am upset by this foot / increase. I understand that the cost of gasoline / student has risen. I also understand that riders have to pay a fair price / snake for bus service. I am willing to pay a little more because I rely on the bus to get to object / work. But an increase / uncle of twenty percent is too much.


This increase is especially difficult to accept when you see the city's plans to build a new sports stadium. The government will spend millions on this project even though we already have a science / stadium. If we delay the stadium, some of that money can be used to offset the increase in bus fares / views. Then, in a few years, we can decide if we really do need a new sports cloth / arena. Please let the city council know you care about this issue by attending the next public meeting / frames.

Literacy – Sample Item 1

This first literacy sample focuses on the following aspects of the literacy construct:


<i>Cognitive Process</i>	<i>Access and identify</i>
<i>Context</i>	<i>Personal</i>
<i>Medium</i>	<i>Print</i>

For PIAAC, item difficulty is reported along a five-level scale with Level 1 being the easiest items and Level 5 being the hardest. This sample is a Level 3 item. Respondents are asked answer the question shown in the left pane by highlighting information in the list of rules for a preschool.



Look at the list of preschool rules. Highlight information in the list to answer the question below.

What is the latest time that children should arrive at preschool?



Preschool Rules

Welcome to our Preschool! We are looking forward to a great year of fun, learning and getting to know each other. Please take a moment to review our preschool rules.


- Please have your child here by 9:00 am.
- Bring a small blanket or pillow and/or a small soft toy for naptime.
- Dress your child comfortably and bring a change of clothing.
- Please no jewelry or candy. If your child has a birthday please talk to your child's teacher about a special snack for the children.
- Please bring your child fully dressed, no pajamas.
- Please sign in with your full signature. This is a licensing regulation. Thank you.
- Breakfast will be served until 7:30 am.
- Medications have to be in original, labeled containers and must be signed into the medication sheet located in each classroom.
- If you have any questions, please talk to your classroom teacher or to Ms. Marlene or Ms. Tree.

Literacy – Sample Item 2


Sample 2 focuses on these aspects of the literacy construct:

<i>Cognitive Process</i>	<i>Access and identify</i>
<i>Context</i>	<i>Personal</i>
<i>Medium</i>	<i>Print</i>

For PIAAC, item difficulty is reported along a five-level scale with Level 1 being the easiest items and Level 5 being the hardest. This sample is a Level 2 item. In this sample item, respondents are asked to click on the chart with information about exercise equipment to mark their response. Each of the cells and all of the images are “clickable” and multiple responses can be selected.



Physical Exercise Equipment



Look at the exercise equipment chart. Click on the chart to answer the question below.

Which muscles will benefit most if you use the gym bench?

How to choose?

- 1 Decide what effect you want the exercise to have on your body.
- 2 Assess the space you have available at home.
- 3 Choose the equipment that suits your objectives. If necessary ask a specialist for advice.

For example:

OBJECTIVE Burn off calories	STRATEGY Cardiovascular exercises	EQUIPMENT Rowing machine, Bicycle, Skimachine, Treadmill, Stairs, ...
Strengthen your muscles	Endurance exercises	Bench for Press-ups, Weights and Dumbbells, Elastic Tubes,


Effects on...	Cardio-Training					Muscle Building							
	Exercise bicycle	Rowing machine	Stepper	Treadmill	Air trainer	Dumbbells, weights	Elastic	Gym bench	Muscle-building bench	Multi-trainer	AB trimmer	AB shaper	AB roller
Arm strength	Ineffective	Good	Average	Ineffective	Good	Very good	Very good	Good	Good	Good	Very good	Good	Good
Leg strength	Good	Very good	Average	Very good	Good	Ineffective	Good	Average	Good	Good	Ineffective	Good	Good
Abdominal muscles	Average	Very good	Good	Good	Average	Ineffective	Good	Very good	Good	Average	Very good	Very good	Very good
Overall muscle building	Ineffective	Very good	Ineffective	Average	Ineffective	Average	Good	Good	Good	Average	Good	Good	Good
Heart/arteries	Very good	Good	Very good	Very good	Good	Ineffective	Average	Average	Average	Good	Average	Average	Average
Flexibility	Ineffective	Good	Ineffective	Ineffective	Average	Average	Average	Good	Ineffective	Ineffective	Average	Good	Good
Joints	Good	Very good	Good	Good	Good	Good	Average	Average	Good	Good	Average	Average	Average
Slimming	Good	Average	Very good	Good	Good	Ineffective	Average	Good	Average	Average	Good	Good	Good
Dangers	None	Back	None	Legs		It is best to learn to use these types of apparatus properly before you make a major effort							

Literacy – Sample Item 2, continued

Most of the literacy items have more than one question associated with each stimulus. A second item in this set, shown below in Figure 3, focuses on the following aspects of the literacy construct:

<i>Cognitive Process</i>	<i>Integrate and interpret</i>
<i>Context</i>	<i>Personal</i>
<i>Medium</i>	<i>Print</i>

For PIAAC, item difficulty is reported along a five-level scale with Level 1 being the easiest items and Level 5 being the hardest. This sample is a Level 2 item.



Physical Exercise Equipment

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Look at the exercise equipment chart. Click on the chart to answer the question below.

Which piece of equipment listed received the largest number of “Ineffective” ratings?

How to choose?

- 1 Decide what effect you want the exercise to have on your body.
- 2 Assess the space you have available at home.
- 3 Choose the equipment that suits your objectives. If necessary ask a specialist for advice.

For example:

OBJECTIVE Burn off calories	STRATEGY Cardiovascular exercises	EQUIPMENT Rowing machine, Bicycle, Skimachine, Treadmill, Stairs, ...
Strengthen your muscles	Endurance exercises	Bench for Press-ups, Weights and Dumbbells, Elastic Tubes,

Effects on...	Cardio-Training					Muscle Building							
	Exercise bicycle	Rowing machine	Stepper	Tread-mill	Air trainer	Dumb-bells, weights	Elastic	Gym bench	Muscle-building bench	Multi-trainer	AB trimmer	AB shaper	AB roller
Arm strength	Ineff-ective	Good	Average	Ineff-ective	Good	Very good	Very good	Good	Good	Good	Very good	Good	Good
Leg strength	Good	Very good	Average	Very good	Good	Ineff-ective	Good	Average	Good	Good	Ineff-ective	Good	Good
Abdo-minal muscles	Average	Very good	Good	Good	Average	Ineff-ective	Good	Very good	Good	Average	Very good	Very good	Very good
Overall muscle building	Ineff-ective	Very good	Ineff-ective	Average	Ineff-ective	Average	Good	Good	Good	Average	Good	Good	Good
Heart/arteries	Very good	Good	Very good	Very good	Good	Ineff-ective	Average	Average	Average	Good	Average	Average	Average
Flexi-bility	Ineff-ective	Good	Ineff-ective	Ineff-ective	Average	Average	Average	Good	Ineff-ective	Ineff-ective	Average	Good	Good
Joints	Good	Very good	Good	Good	Good	Good	Average	Average	Good	Good	Average	Average	Average
Slim-ming	Good	Average	Very good	Good	Good	Ineff-ective	Average	Good	Average	Average	Good	Good	Good
Dangers	None	Back	None	Legs									

It is best to learn to use these types of apparatus properly before you make a major effort

Numeracy – Sample Item 1

This sample item focuses on the following aspects of the numeracy construct:

<i>Content</i>	<i>Data and chance</i>
<i>Process</i>	<i>Interpret, evaluate</i>
<i>Context</i>	<i>Community and society</i>

For PIAAC, item difficulty is reported along a five-level scale with Level 1 being the easiest items and Level 5 being the hardest. This sample is a Level 3 item. Respondents are asked to respond by clicking on one or more of the time periods provided in the left pane on the screen.

OECD PIAAC

Look at the graph about the number of births. Click to answer the question below.

During which period(s) was there a decline in the number of births? Click all that apply.

- 1957 - 1967
- 1967 - 1977
- 1977 - 1987
- 1987 - 1997
- 1997 - 2007

The following graph shows the number of births in the United States from 1957 to 2007. Data are presented every 10 years.



Year	Number of Births
1957	4,300,000
1967	3,520,959
1977	3,326,632
1987	3,809,394
1997	3,880,894
2007	4,315,000


Correct Response: 1957 - 1967 AND 1967 – 1977

Numeracy – Sample Item 2

This sample item focuses on the following aspects of the numeracy construct:

<i>Content</i>	<i>Dimension and shape</i>
<i>Process</i>	<i>Identify, locate or access</i> <i>Act upon, use (estimate)</i>
<i>Context</i>	<i>Everyday life or Workplace</i>



For PIAAC, item difficulty is reported along a five-level scale with Level 1 being the easiest items and Level 5 being the hardest. This sample is a Level 3 item. Respondents are asked to type in a numerical response based on the graphic provided.



Look at the thermometer. Using the number keys, type your answer to the question below.

What is the temperature shown on the thermometer in degrees Fahrenheit (°F)?

 °F




Correct Response: Any value between 77.7 and 78.3

Numeracy – Sample Item 3

This second item in the set focuses on the following aspects of the numeracy construct:

<i>Content</i>	<i>Dimension and shape</i>
<i>Process</i>	<i>Identify, locate or access</i> <i>Act upon, use (measure)</i>
<i>Context</i>	<i>Everyday life or Workplace</i>


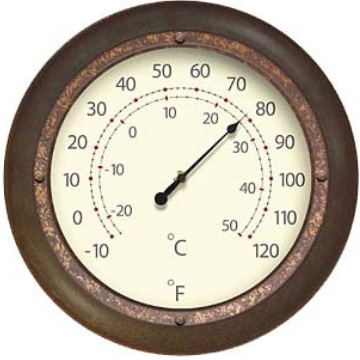
For PIAAC, item difficulty is reported along a five-level scale with Level 1 being the easiest items and Level 5 being the hardest. This sample is a Level 3 item. Again, respondents are asked to type in a numerical response based on the graphic provided.



Look at the thermometer. Using the number keys, type your answer to the question below.

If the temperature shown decreases by 30 degrees Celsius, what would the temperature be in degrees Celsius (°C)?

 °C




Correct Response: Any value between -4 and -5

Numeracy – Sample Item 4

This sample item focuses on the following aspects of the numeracy construct:

<i>Content</i>	<i>Quantity and Number</i>
<i>Process</i>	<i>Act upon, use (compute)</i>
<i>Context</i>	<i>Community and society</i>

For PIAAC, item difficulty is reported along a five-level scale with Level 1 being the easiest items and Level 5 being the hardest. This sample is a Level 4 item. Again, respondents are asked to type in a numerical response based on the information provided.


Section _4


Unit 11 - Question 1/1

Read the article about wind power stations. Using the number keys, type your answer to the question below.

How many wind power stations would be needed to replace the power generated by the nuclear reactor?

Wind Power Stations

In 2005, the Swedish government closed the last nuclear reactor at the Barsebäck power plant. The reactor had been generating an average energy output of 3,572 GWh of electrical energy per year.



Work continues in Sweden on installing large offshore wind farms using wind power stations. Each wind power station produces about 6,000 MWh of electrical energy per year.

For your information:
 Electrical energy is measured in Watt hours (Wh)

1 kWh	= 1 kilo Wh	= 1,000 Wh
1 MWh	= 1 Mega Wh	= 1,000,000 Wh
1 GWh	= 1 Giga Wh	= 1,000,000,000 Wh

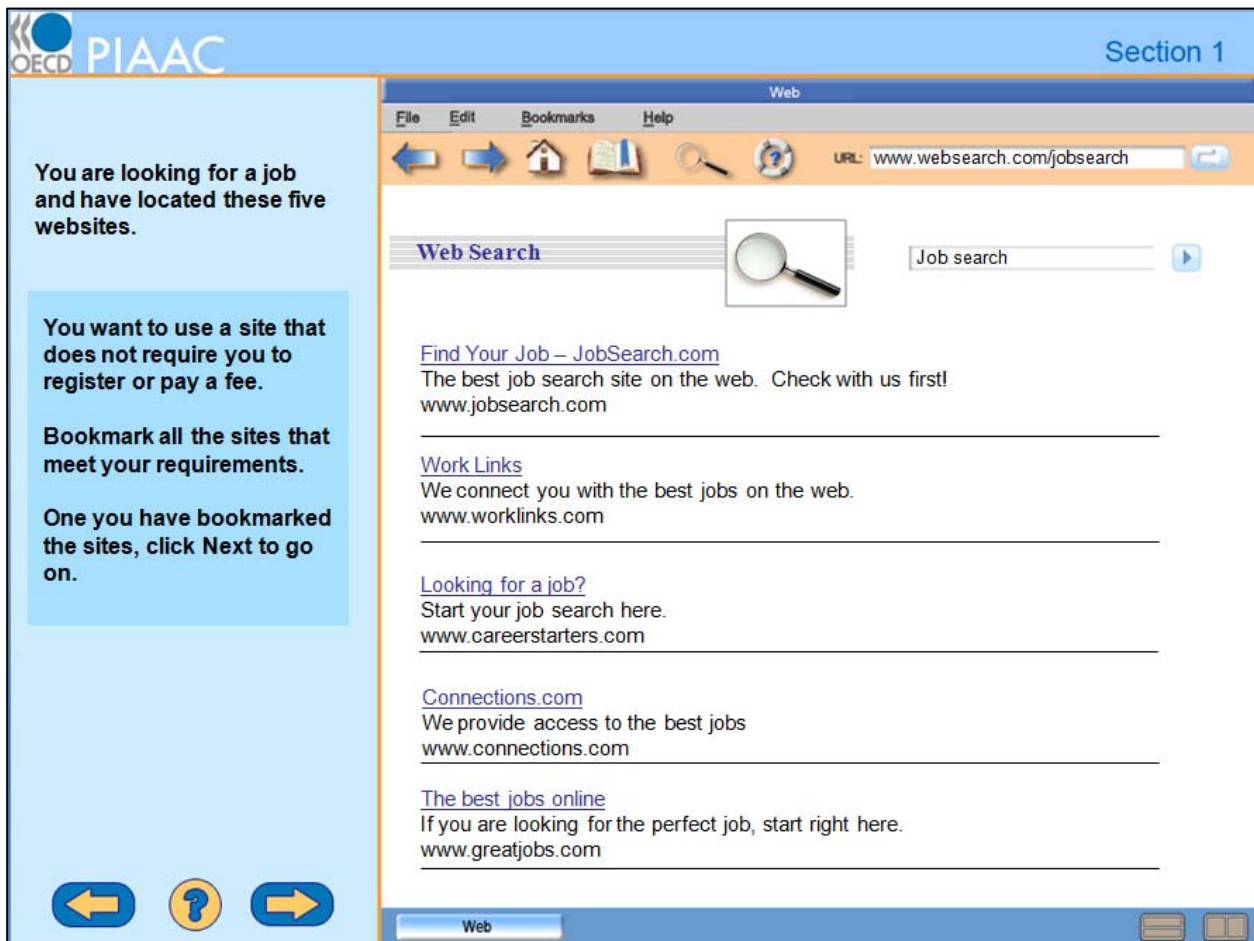
Correct Response: Either 595, 596 OR 600

Problem Solving in Technology Rich Environments – Sample Item 1

This is an example of an item created for the PIAAC domain of Problem Solving in Technology Rich Environments. In this item, respondents must access and evaluate information in the context of a simulated job search. As shown in the item directions, located on the left side of the screen, respondents must find one or more sites that do not require users to register or pay a fee.

For PIAAC, item difficulty is reported along a five-level scale with Level 1 being the easiest items and Level 5 being the hardest. This sample is a Level 4 item.

Figure 1: Opening screen of job search task



As the screen clip above shows, this item is situated in a simulated web environment that includes tools and functionality similar to those found in real-life applications. Users are able to:

- Click on links on both the results page and associated web pages,
- Navigate using the Back and Forward arrows or Home icon,
- Bookmark web pages and view or change those bookmarks.

Problem Solving in Technology Rich Environments – Sample Item 1, continued

The response mode in this item is reflective of real-life actions within the environment - in this case, respondents are asked to bookmark their selection. In addition to scoring this item based on the selection of the two correct sites, the process data and path tracking that are possible in this computer-based item also contribute to the response data. For example, one of the websites, as shown in Figure 2, meets the specified criteria, but the relevant information about fees and registration is not on the opening page. If a respondent bookmarks this site as a correct answer without clicking on the “Learn More” link to view the relevant information (shown in Figure 3) we might interpret that response differently than we would if that page had been viewed. This breadth of information, combined with frameworks that specify behaviors of interest, allow us to learn more about what adults know and can do relative to the problem-solving construct as it is being measured in PIAAC.

Figure 2: Website where relevant information regarding fees and registration is not on opening screen

The screenshot displays a PIAAC test interface. On the left, a light blue sidebar contains instructions: "You are looking for a job and have located these five websites.", "You want to use a site that does not require you to register or pay a fee.", "Bookmark all the sites that meet your requirements.", and "Once you have bookmarked the sites, click Next to go on." Below these instructions are navigation buttons: a left arrow, a question mark, and a right arrow. The main area shows a web browser window titled "Web" with a menu bar (File, Edit, Bookmarks, Help) and a URL bar containing "http://www.worklinks.com". The website content includes a purple header with "Work Links", a green banner with "Connecting you to the BEST Jobs", a photo of a diverse group of people giving thumbs up, and a "Learn More" button. Below the photo, text reads: "Thousands of new jobs in the last 7 days" and "Search job sites, newspapers, associations and company career pages". The browser's status bar at the bottom shows "Web" and system icons.

Problem Solving in Technology Rich Environments – Sample Item 1, continued

Figure 3: Second page of same website – relevant information is located in the directions for the form which indicate that users must sign up (register) and pay a fee

The image shows a screenshot of a web browser window. On the left side, there is a light blue sidebar with the following text:

- You are looking for a job and have located these five websites.
- You want to use a site that does not require you to register or pay a fee.
- Bookmark all the sites that meet your requirements.
- One you have bookmarked the sites, click Next to go on.

At the bottom of the sidebar are three navigation icons: a left arrow, a question mark, and a right arrow.

The main browser window displays the 'Work Links' website. The browser's address bar shows the URL: <http://www.worklinks.com/signup>. The website header includes the 'Work Links' logo and the tagline 'Connecting you to the BEST Jobs'. Below the header, there is a sign-up prompt: 'To search for your new job, sign up for Work Links now!'. The sign-up form contains the following fields:

- First Name
- Last Name
- Your Email Address
- Re-Enter Email
- Create a password
- Re-Enter Password

Below the form, the pricing is listed as '\$15.00 for 1 month or \$33.00 for monthly access plan'. There are also fields for 'Credit Card Type', 'Credit Card Number', and 'Expiration Date'.

Problem Solving in Technology Rich Environments – Sample Item 2

In this second item, respondents need to select a set of files to download onto a portable music player. As shown in Figure 4, the item requires respondents to select files meeting specified criteria in terms of genre (jazz and rock) and file size (maximum of 20 MB).

The software includes an automatic summing functionality (“Total Size Selected”) that facilitates the task by updating the total file size as files are selected or de-selected. Respondents must monitor progress as they select files, checking against the provided criteria to know when they have satisfied the constraints presented in the problem.

For PIAAC, item difficulty is reported along a five-level scale with Level 1 being the easiest items and Level 5 being the hardest. This sample is a Level 2 item.

The screenshot shows a software interface for a PIAAC assessment. On the left, a light blue panel contains instructions: "You want to copy some music files to your portable music player. The music player has room for 20 MB and you want as many files as possible. You want to include only jazz and rock music. Select the files to include. Once you have selected the files, click Next to continue." Below the instructions are navigation buttons: a back arrow, a question mark, and a forward arrow.

The main area is a spreadsheet titled "Spreadsheet" with a menu bar (File, Edit, Data, Help) and a toolbar with icons for file operations. The spreadsheet table has the following data:

	Title	Size	Time	Artist	Genre
<input type="checkbox"/>	A Foreign Affair	14.8 MB	11:40	Don Rader Quartet	Jazz
<input type="checkbox"/>	About the Blues	4.3 MB	3:08	Julie London	Blues
<input type="checkbox"/>	Another Mind	7.8 MB	8:44	Hiromi Uehara	Jazz
<input type="checkbox"/>	Blue Trane	10 MB	9:03	John Coltrane	Jazz
<input type="checkbox"/>	Don't Give up on Me	3.5 MB	3:45	Solomon Burke	Blues
<input type="checkbox"/>	Far Out	5.3 MB	5:25	Antonio Farao	Jazz
<input type="checkbox"/>	Fire and Water	5.3 MB	4:00	Free	Blues
<input type="checkbox"/>	If	4.9 MB	5:48	Myriam Alter	Jazz
<input type="checkbox"/>	Imagine	2.2 MB	3:04	John Lennon	Rock
<input type="checkbox"/>	Inclined	7.1 MB	5:59	Carol Welsman	Jazz
<input type="checkbox"/>	On an Island	16 MB	6:47	David Gilmore	Blues
<input type="checkbox"/>	Pass It On	3.1 MB	3:36	Albert Calvo	Jazz
<input type="checkbox"/>	Raindrops, Raindrops	5.2 MB	3:46	Karin Krog	Jazz
<input type="checkbox"/>	Say You Will	8.8 MB	3:47	Fleetwood Mac	Rock
<input type="checkbox"/>	Skin Deep	7.1 MB	4:28	Buddy Guy	Blues
<input type="checkbox"/>	Speak No Evil	6.9 MB	5:13	Flora Purim	Jazz
<input type="checkbox"/>	The Other Side of Blue	6.5 MB	5:08	Jean Shy & Jobo	Jazz
<input type="checkbox"/>	The Rise	7.3 MB	7:28	Julien Lourau	Jazz
<input type="checkbox"/>	The Rising	4.5 MB	4:50	Bruce Springsteen	Rock

At the bottom of the spreadsheet, there is a field labeled "Total Size Selected (MB)" with an empty input box. The spreadsheet title bar at the very bottom shows "Spreadsheet" and some window control icons.

It is also possible to sort the spreadsheet by file size and/or genre, a strategy that can increase task efficiency. The connection between the use of resources in a technology rich environment and resulting efficiencies for solving problems is one aspect of the domain that is emphasized in the framework and therefore included across items in the assessment.