# Mechanical Comprehension Test

**NAME OF THE TEST**  
Mechanical Comprehension Test

**SHORT NAME**  
MCT

**DESCRIPTION OF THE TEST**  
A pictorial group test of Mechanical Comprehension involving three factors - mechanical reasoning, spatial visualization (kinetic) and perceptual speed which in Guilford Terminology are NFT, CFT-k (kinetic) and EFU respectively.

**AUTHOR**  
P. A. Trivedi

**NUMBER OF ITEMS**  
76

**TIME**  
50 Minutes

**ANSWERS**  
On separate answer sheet. Answer to be chosen from among 3.

**AIDS**  
- (1) Roll-up-board  
- (2) Chalkstick  
- (3) Pointer  
- (4) Stopwatch

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1971
Write the following on the roll-up-board before the commencement of the test.

Date of to-day: ________

Question Answer
Sample \( X \) A B C
For Practice \( Y \) A B C

First see that all the pupils are comfortably accommodated in the examination hall. Walk around and make informal queries to ensure that the seating arrangement is satisfactory. If necessary, instruct the pupils to sit apart to prevent them from copying from others. Make sure that the pupils sitting at the farthest end hear what is said or explained.

Keep some sharpened pencils ready for those who require them or for those, whose pens go out of order or run out of ink.

I am going to give you an interesting work today. The nature of this work is different from the ordinary examinations you take. It is a test of your ability such as capacity to think or reason, capacity to comprehend mechanical principles, capacity to observe things critically etc.
A special procedure is to be followed for doing this work. I shall explain to you the whole procedure. I shall give to each one of you two things—a test booklet and an answer sheet. Nothing is to be written on the test booklet. All the answers are to be made on the separate answer sheet. Before you start working on the test, I shall explain to you in detail how the answers are to be made on the separate answer sheet. In order that you understand the way of answering two examples—one as sample and the other for practice, are given. Try to understand the sample example with due attention. If you have any difficulty, you are at liberty to ask me before actually working on the test, but do not ask anything once the work begins. Another important characteristic of the test is that all of you must start the work simultaneously and also stop at the same time. When the directions have been completed and your doubts clarified, I will give you a signal, "Begin". You have to start working on the test only when I give you that signal. Similarly, you must at once put your pencil or pen down when I say, "Stop writing". If you finish the work before the prescribed time, go through your answers again. Remain sitting at your seats until the test-booklets and answer sheets have been collected.
<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Say</th>
<th>Act</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Now, I shall first distribute to you the answer sheets. Fill in the requested information at the top of the answer sheet.</td>
<td>Distribute the answer sheets. Hold one paper up and show the appropriate side of the answer sheet.</td>
</tr>
<tr>
<td>7</td>
<td>Fill in the blank places - your name, sex, name of the school, place, birth-date, age, standard, division and date. If you are not sure of your birth date do not write anything. (Pause)</td>
<td>Show on the top of the answer sheet, the specific portion to be filled in.</td>
</tr>
<tr>
<td>8</td>
<td>Now I shall distribute to each one of you this test booklet.</td>
<td>Hold up the test booklet so that all the pupils can see it.</td>
</tr>
<tr>
<td>9</td>
<td>Do not open the booklet until you are told to do so. Do not write anything on it. (Pause)</td>
<td>Place the booklets on the desks with the title page facing the pupils.</td>
</tr>
<tr>
<td>10</td>
<td>You are given the test booklet and the answer sheet. Keep the test booklet before you and the answer sheet beside it at your right side. Do not turn the answer sheet unless you are told to do so.</td>
<td>Keep a spare copy of the test booklet and read slowly and with proper emphasis instructions 1 to 7 given on the title page.</td>
</tr>
<tr>
<td>11</td>
<td>Now, I shall read the instructions printed on the cover page of the test booklet. You also read them silently with me.</td>
<td>Demonstrate how you turn the page.</td>
</tr>
<tr>
<td>12</td>
<td>Turn the page. (Pause)</td>
<td></td>
</tr>
</tbody>
</table>
| 13      | I shall read the printed matter on page 2. You also read them silently with me and try to understand it. | Read the printed matter given on page 2 of the test booklet. When the sentence, "So, in the answer sheet against question
Now, see the practice example I on the opposite page.

I shall read the first two lines printed on page 3.

(Read the following)

"Now, as in the sample example, indicate the answer against the practice example I on your answer sheet by encircling, whichever is the correct answer from among A, B and C."

I give you about one minute's time to do this work.

(After about one minute)

I shall call out the correct answer for the Practice Example. It is A. Why? (Pause) Because the diameter of the tap above the beaker A is larger than that of the top above beaker B. Therefore, the correct answer is A. Those of you who have encircled A have given the correct answer.
not be disturbed if your answer is incorrect, because this is the Practice Example. The actual test is yet to begin.

17 Now, I shall read the last four lines printed on page 3. You also read them silently with me.

(Read the following)

"In the same manner, in this booklet, there are many more pictures accompanied by questions on them. Read each question very carefully, study the picture critically, and indicate the correct answer by encircling it in the separate answer sheet. Remember well, you have to find the correct answer from among the three alternatives A B and C."

18 Do not turn the page until you are asked to do so.

19 If you want to change the answer you have already encircled, put a cross on it, but do not waste your time in erasing it by a rubber.

20 There are 76 questions in this booklet. You will get 50 minutes to mark your answers.

21 Now, turn your answer sheet like this. (Pause)

Demonstrate how the answer sheet is to be turned. Make sure that all the testees have turned over their answer sheets.
Sr. No. Say Act
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22 Turn over page 3 of the test booklet and begin. Note the exact time in hours, minutes and seconds. Add to it 50 minutes to get the time when the test is to be completed. Note the starting, as well as the finishing time on the black board or the roll-up-board.

Move about in the room to see that all the students work properly.

23 (After 50 minutes) Stop writing. Put your pen or pencil down. Immediately gather the answer sheets from all the pupils. Then collect the test booklets. Count the answer sheets and the test booklets and tally them.

INSTRUCTIONS FOR SCORING

1. Put a cross with red pencil or pen on the answer where more than one uncorrected circles have been made.

2. Place the window-type scoring stencil on the answer sheet and count the correct answers, except answers crossed with red pencil or pen.

3. The score is the number of correct answers. Enter it in the blank space against letter R on the answer sheet.

SCORING KEY

As per Appendix F, p. 419.

READY RECKONER OF THE PRs

As per Tables 28 & 29, pp. 183 - 184.