

WECHSLER INTELLIGENCE SCALE FOR CHILDREN

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GENERAL INFORMATION

Directions Read each question as stated and in the order given.

Subjects 8 or older, not suspected mental defectives. Subject may begin with item 4 and be credited for items 1, 2 and 3 if he passes items 4, 5 and 6. If any of these is failed, administer items 1, 2 and 3 before proceeding further.

✓ If the response is not clear it is permissible to say Explain more fully, or Tell me more about it, but not to ask leading questions nor to spell the words.

— Discontinue 5 consecutive failures.

Scoring Each item is scored 1 or 0. Essentials of acceptable answers are noted below.

Maximum score: 30 points.

TEST QUESTIONS AND ACCEPTABLE RESPONSES

1. How many ears have you?
Two
2. What do you call this finger? (Show thumb)
Thumb
3. How many legs does a dog have?
Four
4. From what animal do we get milk? *Cow(s); goat(s)* *sheep, lambs, ! MAMA*
5. What must you do to make water boil?
Put it on the stove; heat it; etc.
6. In what kind of a store do we buy sugar? *C*
Grocery store; food store; name of local store like "A & P"
7. How many pennies make a nickel?
Five
8. How many days in a week?
Seven
9. Who discovered America? *C*
Columbus; Leif Ericson
10. How many things make a dozen?
Twelve
11. What are the four seasons of the year? *C*
Summer, Fall (Autumn), Winter, Spring (Subject not required to give them in this order)

12. What is the color of rubies? Red; Maroon
13. Where does the sun set?
In the West (If Subject points, say Yes, but what direction is that?)
14. What does the stomach do?
Digests food
15. Why does oil float on water?
Because it is lighter
16. Who wrote "Romeo and Juliet"?
Shakespeare; Tschaikowsky
17. What is celebrated on the Fourth of July?
American Independence from England
18. What does C.O.D. mean?
Cash or collect on delivery (or a correct description of the process)
19. How tall is the average American man?
Any answer from 5'7" to 5'10"
20. Where is Chile?
South America
21. How many pounds are there in a ton?
2000 (short ton); 2240 (long ton)
22. What is the capital of Greece?
Athens
23. What does turpentine come from?
Its source, pine or fir tree, must be indicated
24. How far is it from New York to Chicago?
Any answer from 800 to 1000 miles
25. When is Labor Day?
The first Monday in September. (If the Subject says "September 4" or "Next Monday," owing to the fact that the day is approaching or has just been passed, say Yes, but when does it come in any year? If the Subject does not give the correct answer, he is scored 0.)
26. Who discovered the South Pole?
Amundsen
27. What is a barometer?
An instrument for indicating atmospheric pressure; something that predicts changes in weather
28. What is a hieroglyphic?
A sacred character or symbol; pertaining to picture writing, especially of the ancient Egyptians
29. Who was Genghis Khan?
A Mongol conqueror of North China
30. What is a lien?
A legal claim on property as a security for a debt or charge

GENERAL COMPREHENSION

Directions Read each question to the Subject. Sometimes Subjects find it difficult to remember the entire question. It is, therefore, always permissible to repeat the question. It is good practice to repeat the question if no response is obtained after ten or fifteen seconds, but no alteration or abbreviation is permitted. It may be necessary to encourage the Subject by such remarks as Yes or Go ahead. If the response is not clear Please explain further, or Tell me more about it, may be added.

Discontinue 3 consecutive failures (responses scored 0).

Scoring Each item is scored 2, 1 or 0. See Appendix A for specific scoring criteria and sample answers.

Maximum score: 28 points.

TEST QUESTIONS

1. What is the thing to do when you cut your finger?
2. What is the thing to do if you lose one of your friend's balls (dolls)? *c What if they don't have friends / tops?*
3. What would you do if you were sent to buy a loaf of bread and the grocer said he did not have any more?
4. What is the thing to do if a fellow (girl) much smaller than yourself starts to fight with you?
5. What should you do if you see a train approaching a broken track?
6. Why is it better to build a house of brick than of wood? *c*
7. Why are criminals locked up? *c (could be stain in another culture)*
8. Why should women and children be saved first in a shipwreck?
9. Why is it better to pay bills by check than by cash? *c*
10. Why is it generally better to give money to an organized charity than to a street beggar? *?*
11. Why should most government positions be filled through examinations?
12. Why is cotton fiber used in making cloth?
13. Why do we elect (or need to have) senators and congressmen? *c*
14. Why should a promise be kept?

ARITHMETIC

Directions Problems 1 through 13 are read to the Subject. Problems 14, 15 and 16 are presented on separate cards for the Subject to read. There is a time limit for each problem. Begin timing immediately after stating the problem. For Problems 1, 2 and 3, use the blocks for the Block Design Test.

If the Subject requests, or if it is apparent that he failed to understand, the problem may be repeated. However, the timing always begins at the end of the first statement of the problem.

For Subjects 8 and older, not suspected mental defectives. Begin with problem 4 and give credit for problems 1, 2 and 3. If the Subject fails to pass both problems 4 and 5, administer problems 1, 2 and 3. If the Subject then passes problem 3, he is entitled to try problem 6, because he has not yet had three consecutive failures.

Discontinue 3 consecutive failures.

Scoring Each problem is scored 1 or 0. Problems 2 and 3 are given $\frac{1}{2}$ credit each if the Subject makes an error but corrects it within the time limit.

Maximum score: 16 points. (Round half score upward.)

PROBLEMS AND ANSWERS

- | | Time | Answer |
|---|------|--------|
| 1. Place nine blocks in a row before the Subject and say Count these blocks with your finger. | 45" | 9 |

2. Place the nine blocks in a row before the Subject and say Now take away all of the blocks except four. Leave four blocks for yourself.

45"	4
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Note for problems 2 and 3: If the Subject removes an incorrect number of blocks and the time limit has not expired, say Count the blocks you have left. If on recounting, the Subject spontaneously corrects his error, he receives $\frac{1}{2}$ credit. If there is any doubt as to which blocks the Subject is leaving and taking away, question him.

3. Place the nine blocks in a row before the Subject and say Now take away all of the blocks except seven. Leave seven blocks for yourself.

45"	7
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- J*4. If I cut an apple in half, how many pieces will I have? Time Answer
30" 2
5. John had 4 pennies and his mother gave him 2 more. How many pennies did he have altogether? 30" 6
6. James had 8 marbles and he bought 6 more. How many marbles did he have altogether? 30" 14
7. A boy had 12 newspapers and sold 5. How many did he have left? 30" 7
8. At 7c each, what will 3 cigars cost? 30" 21c
9. A milkman had 25 bottles of milk and sold 11 of them. How many bottles did he have left? 30" 14
10. Four boys had 72 pennies. They divided them equally among themselves. How many pennies did each boy receive? 30" 18
11. A workman earned \$36; he was paid \$4 a day. How many days did he work? 30" 9
12. If you buy 3 dozen oranges at 30c a dozen, how much change should you get back from \$1.00? 60" 10c
13. 36 is two-thirds of what number? (*Do they know fractions?*) 30" 54
- Problems 14, 15 and 16 are presented to the subject on separate cards. For 14, say Read this example *aloud*. After you have read it, work it out mentally. Give me your answer when you have finished. For 15 and 16, say Now read this aloud and give me your answer. Begin timing after the Subject has finished reading the problem.
- J*14. If 3 pencils cost 5c, what will be the cost of 24 pencils? 60" 40c
- J*15. If a taxi charges 20c for the first quarter mile and 5c for each quarter mile thereafter, what will the fare for a two mile trip be? 120" 55c
16. Smith and Brown start a card game with \$27 each. They agree that at the end of each deal the loser shall pay the winner one-third of what he (the loser) has in his possession. Smith wins the first three deals. How much does Brown have at the beginning of the fourth deal? 120" \$8

SIMILARITIES

ANALOGIES (Under 8
+ suspected
MR)

For Subjects under 8,
and older suspected
mental defectives.

Directions Before reading each item, say Finish what I want to say. All four items are given to the Subject.

1. Lemons are sour but sugar is _____.
2. You walk with your legs and throw with your _____.
3. Boys grow up to be men and girls to be _____.
4. A knife and a piece of glass both _____.

If the Subject fails to complete the first sentence, or seems not to understand, finish it for him, thus: Lemons are sour but sugar is *sweet*. The same procedure is followed if the Subject fails the second sentence. After this, no further help is given. If the Subject succeeds, say That is right. Now try this one, and continue with the remaining sentences.

If the Subject passes two of the four items, proceed with *Similarities*.

Scoring 1 point for each item correctly answered. The only correct responses for the items are, respectively: 1. sweet; 2. arms, hands; 3. women, ladies, mothers; 4. cut.

SIMILARITIES

For Subjects 8 and
older, not suspected
mental defectives.

Directions Say In what way are a PLUM and a PEACH alike? If the Subject says that they are not alike or fails to answer, say Oh yes, they are both fruit, you eat both, and both have skins and seeds. Now tell me in what way are a CAT and a MOUSE alike?

If the Subject fails on CAT-MOUSE, explain again and go on to item 7, but give no further help. *They are both animals, both have tails, ears, fur, & a tail. They both eat food.*
Subjects who have not been given *Analogies* and who score less than 3 points on *Similarities* must be given *Analogies* according to the instructions for

younger children. They are given the total of points earned on both parts of the test.

Subjects who begin with *Similarities* and earn at least 3 points are given full credit (4 points) for *Analogies*.

— Discontinue 3 consecutive failures (responses scored 0) on the *Similarities* items.

Scoring 2, 1 or 0 points for each *Similarities* item (5-16), depending on the degree and quality of the generalizations. See Appendix B for scoring criteria and sample answers. If the Subject gives multiple acceptable responses, credit him on the basis of the best response. If the Subject gives differences or wrong answers *in addition to* some correct responses, then ask, Now which one is it? and score according to his decision. Spontaneous improvement of responses is easily recognized and query is not necessary. Added remarks obviously not a part of the Subject's answer do not enter into the scoring. Example — CAT-MOUSE: both have eyes, tails, legs . . . my cat caught a mouse.

Maximum score: 28 points. The sum of points earned on *Analogies* and *Similarities*.

TEST ITEMS

- 5. Plum.....Peach
- 6. Cat.....Mouse
- 7. Beer.....Wine
- 8. Piano.....Violin
- 9. Paper.....Coal
- 10. Pound.....Yard
- 11. Scissors.....Copper pan
- 12. Mountain.....Lake
- 13. Salt.....Water
- 14. Liberty.....Justice
- 15. First.....Last
- 16. The numbers 49 and 121

VOCABULARY

Directions Say I want to see how many words you know. Listen carefully and tell me what these words mean. Bicycle . . . what is a bicycle? Proceed with the words in the order listed, repeating at each presentation, What is a _____? or What does _____ mean? With more intelligent and older Subjects the formal question may be omitted after the third word; just pronounce the word. The Examiner must be certain that he is using standard pronunciations of the words.

Subjects 8 and older, not suspected mental defectives. Subject may be started with word 10. However, if the Subject fails to give a 2-point definition for any one of the words 10 through 14, the Examiner must return to word 9 and go backwards, word by word, until the requirement of five consecutive 2-point successes is met. Then he should proceed forward again from the word beyond the one which caused this digression. Credit the Subject with 2 points for each of the words 1-9 on which it was unnecessary to test him.

Occasionally, it is difficult for the Examiner to decide whether the Subject does or does not know the meaning of a word. In such instances it is permissible to say Please explain a little more, or make some similar neutral inquiry. The following principles should govern the supplementary inquiry:

1. If the Examiner feels the response is vague (cannot readily be scored) questioning is permissible.
2. The *criterion examples* of 0 responses (Appendix C) are given to illustrate marginal 0 responses, ones which reveal some understanding of the word but are nevertheless too poor to be scored 1 point.
Responses scorable as 0 should be questioned if the Examiner believes that the response actually given indicates that a better response can be evoked by *neutral inquiry*.
The Examiner, however, should avoid further questioning of a clearcut 0 response.
3. Spoilage of response after inquiry. After questioning, a response may be scored lower if the additional matter reveals serious misunderstanding, or if it reveals the first response as being a mere *verbalism*.
4. Under all circumstances the inquiry should be limited to saying Please explain a little more, or very similar neutral (nonleading) statements.
5. The following words sometimes evoke a response which is based on the homonym; fur (fir); sword (soared); gamble (gambol); recede (re-seed). If this occurs, the Examiner pronounces the word again and asks What else does _____ mean? He does not spell the word for the Subject. The scoring is based on the response to the intended word regardless of the quality of the response to the homonym.

—Discontinue 5 consecutive failures (responses scored 0).

Scoring Each word is scored 2, 1 or 0, except that words 1 through 5 are scored only 2 or 0. Specific instructions are given in Appendix C.

Maximum score: 80 points.

TEST WORDS

- | | |
|--------------------|----------------|
| 1. Bicycle | 21. Shilling |
| 2. Knife | 22. Fable |
| 3. Hat | 23. Belfry |
| 4. Letter | 24. Espionage |
| 5. Umbrella | 25. Stanza |
| 6. Cushion | 26. Seclude |
| 7. Nail | 27. Spangle |
| 8. Donkey | 28. Hara-kiri |
| 9. Fur | 29. Recede |
| 10. Diamond | 30. Affliction |
| 11. Join | 31. Ballast |
| 12. Spade | 32. Catacomb |
| 13. Sword | 33. Imminent |
| 14. Nuisance | 34. Mantis |
| 15. Brave | 35. Vesper |
| 16. Nonsense | 36. Aseptic |
| 17. Hero | 37. Chattel |
| 18. Gamble | 38. Dilatory |
| 19. Nitroglycerine | 39. Flout |
| 20. Microscope | 40. Traduce |

DIGIT SPAN

These tests, *Digits Forward* and *Digits Backward*, are administered separately. The highest number of digits correctly reproduced on each are added to give a total score.

DIGITS FORWARD

Directions Say I am going to say some numbers. Listen carefully, and when I am through say them right after me.

The digits should be given at the rate of one per second. All Subjects should be started with the 3-digit Series.

If the Subject repeats Trial I of a Series correctly, it is scored plus and the next higher Series is given. If the Subject fails on Trial I he is given Trial II of the same Series.

Discontinue Failure on both Trials of a given Series.

Scoring Score is the *highest* number of digits repeated without error on either Trial. Thus, if the highest number of digits correctly repeated by a Subject is five digits forward, his score is 5. Maximum score: 9 points.

Digits Forward

Series	Trial I	Trial II
(3)	3-8-6	6-1-2
(4)	3-4-1-7	6-1-5-8
(5)	8-4-2-3-9	5-2-1-8-6
(6)	3-8-9-1-7-4	7-9-6-4-8-3
(7)	5-1-7-4-2-3-8	9-8-5-2-1-6-3
(8)	1-6-4-5-9-7-6-3	2-9-7-6-3-1-5-4
(9)	5-3-8-7-1-2-4-6-9	4-2-6-9-1-7-8-3-5

DIGITS BACKWARD

Directions Say Now I am going to say some more numbers, but this time when I stop I want you to say them backwards. For example, if I say 9-2-7, what would you say? Pause for Subject to respond.

If he responds correctly, say That's right, and proceed with the test, beginning with Trial I of the 3-digit Series.

But, if he fails the example, give him the right answer and try another example, saying Remember, you are to say them backwards; 5-6-3. If he succeeds this time, proceed with the test using Trial I of the 3-digit Series. However, if he fails this second example, proceed with the test, but begin with Trial I of the 2-digit Series.

Some Subjects who pass the unrecorded examples may fail both Trials of the 3-digit Series; in this case give the Trials of the 2-digit Series and then stop. Give the second Trial of a Series only if the first Trial is failed.

Discontinue Failure on both Trials of a given Series.

Scoring Score is the highest number of digits repeated backwards without error. Maximum score: 8 points.

Total Score for Digit Span Test Sum of scores on *Digits Forward* and *Digits Backward*.

Maximum score: 17 points.

Digits Backward

Series	Trial I	Trial II
(2)	2-5	6-3
(3)	5-7-4	2-5-9
(4)	7-2-9-6	8-4-9-3
(5)	4-1-3-5-7	9-7-8-5-2
(6)	1-6-5-2-9-8	3-6-7-1-9-4
(7)	8-5-9-2-3-4-2	4-5-7-9-2-8-1
(8)	6-9-1-6-3-2-5-8	3-1-7-9-5-4-8-2

PICTURE COMPLETION

Directions Before presenting the first card, say I am going to show you some pictures in which there is a part missing. I want you to look at each picture carefully and tell me what is missing. Now, look at this picture. Present Card 1. What important part is missing?

If the correct answer is given for Card 1, continue with the succeeding pictures saying Now what is missing in this one?

— A maximum exposure of 15 seconds is allowed for each picture. If the Subject does not indicate the missing part within this time, the item is scored as a failure and the Examiner presents the next picture.

If the Subject fails to detect the omission on Card 1, say You see pointing a tooth is missing. If the Subject fails on the second picture also, he is helped again, thus: You see a leg is missing. Beginning with the third picture, give no further help. Repeat the question, Now what is missing in this picture? with each successive presentation.

— Sometimes the Subject mentions an unessential missing part. The first time this occurs say Yes, but what is the most important thing missing? but do not repeat this comment for the remaining pictures.

— Discontinue 4 consecutive failures.

Scoring 1 point for each correct response.

Most Subjects give a verbal response for the missing part. Sometimes, however, a Subject will merely point; if he points to where the part is missing, he is credited. The Examiner must be sure that the Subject knows what part is missing. In some of the difficult items the exact name of the missing part may escape a Subject and he may use a synonym or a paronym for it. Thus, in a case of the rooster, the Subject may give the missing part as "the spike," or "the thing he fights with," in which case the response is scored as correct. On the other hand, if the Subject points to the right place but spoils it by making a wrong verbal response, he is failed; for example, on the thermometer a Subject may point toward the mercury bulb and say, "The number is missing."

Maximum score: 20 points.

1890's out for 4 years

THE TEST PICTURES AND CORRECT RESPONSES

- 1. Comb.....tooth (teeth)
- 2. Table.....leg
- 3. Fox.....ear
- 4. Girl.....mouth
- 5. Cat.....whiskers
- 6. Door.....hinge
- 7. Hand.....fingernail (polish)
- 8. Card.....By words or by pointing Subject must indicate *center* spade
- 9. Scissors.....screw
- 10. Coat.....buttonholes
- 11. Fish.....Subject must indicate dorsal fin
- 12. Screw.....slot (slit, crack)
- 13. Fly.....antennae
- 14. Rooster.....spur
- 15. Profile.....eyebrow
- 16. Thermometer.....mercury in bulb
- 17. Hat.....hatband
- 18. Umbrella.....spokes
- 19. Cow.....cleft in hoof
- 20. House.....shadow

PICTURE ARRANGEMENT

On the back of each card the printed numbers show the order of laying out the cards from the Subject's left. The printed letters on the back provide the code for scoring. See below.

Directions

For Subjects under 8,
and older suspected
mental defectives.

A-DOG. Place the cards of DOG, beginning at the left of the Subject, and say Here is a picture of a dog that has been cut up. Let's put it together so that it will look right. Put the dog together in the proper order, saying The head should go first, so I put it here; next comes the body; and here is the tail.

Pause while the Subject looks at it. Then gather up the cards from the table, rearrange the parts in the order of presentation, and add Now you put it together and make it look right. Begin timing when the last card is laid down. Allow 75 seconds.

If the Subject fails, say That was not quite right. Watch me again. Demonstrate this time without verbal explanation. After allowing him time to look at the completed arrangement, gather up the cards from the table and present them again in their numbered order, and say Now you try it again. Allow 75 seconds.

Scoring 2 points for passing — in order ABC — on first trial; 1 point for passing on second trial.

B-MOTHER. Say I am going to give you another picture that has been cut up and see if you can put it together yourself. Now make this one look right. Place the cards before the Subject in the numbered order. Allow 75 seconds. If the Subject fails to rearrange the cards in a passing order (TOY or OYT), say No, you see they should go this way. Arrange the cards properly. After permitting the Subject to look at the correct arrangement a few seconds (but not to have a second trial), take up the cards and present TRAIN.

Scoring 2 points for passing — in order TOY; 1 point for passing — in order OYT.

C-TRAIN. Place the cards before the Subject in the numbered order and say Now put this one together so that it will look right. Allow 60 seconds.

Scoring 2 points for passing — in order IRON; 1 point for arranging IR and ON with a space between these two units.

Proceed to the next item, SCALE, only if the Subject has passed (1 or 2 points) at least *two* of the preceding three items.

D-SCALE. Say Here is a little harder one. This time you have to put the pieces together so that they will tell a story. Allow 45 seconds.

Scoring 2 points for passing — in order ABC.

If the Subject passes SCALE, omit Demonstration-FIGHT and continue, beginning with Item 1-FIRE, each time saying Arrange the cards in the right order so they will make a sensible story. The time limit for each item is printed on the Record Form.

However, if the Subject has failed SCALE after passing TRAIN, use Demonstration-FIGHT (see below) before giving Item 1-FIRE.

— Discontinue when the Subject has failed 2 consecutive items; for example, failure on C and D, or D and 1, or 4 and 5.

For Subjects 8 and older, not suspected mental defectives.

Directions For these Subjects, the cards for FIGHT are used as a demonstration and are not scored.

TIME

Demonstration-FIGHT. Lay out the cards for FIGHT in the numbered order and say These pictures tell a story about a man who was in a fight. The man lost the fight. As the pictures are arranged now, they are not as they should be. Watch me and see how I arrange them to make the story right. After laying out the cards correctly, pause a moment for the Subject to study the arrangement.

ITEMS 1-7. The order of presentation is indicated by the printed numbers on the backs of the pictures. The correct order for arrangement is indicated by code letters. There are time limits for each picture-set, and in some cases additional credit is given if the story is completed in less than the defined time limits. Begin timing the Subject as soon as the cards are laid out in their order of presentation. The time limit for each item is printed on the Record Form.

Begin with Item 1-FIRE. Before the presentation, say Now here I have some other pictures which I want you to arrange. Each time I will put them before you in a mixed-up order. I want you to arrange them in their right order so as to make a sensible story.

Thereafter, introduce each set of cards by saying Now arrange these in their right order so as to make a sensible story. This may be shortened when the Subject clearly understands what to do.

Occasionally a Subject will begin his story on the right instead of the usual beginning on the left. When observing this arrangement, ask the Subject Where does your story begin? If the sequence is correct and the starting point indicated, the item is passed.

If the Subject begins with Demonstration-FIGHT and fails FIRE and BURGLAR, credit cannot be assumed for items A through D. Therefore, administer items A, B, C, and D; then stop the test, giving those points he has earned.

—Discontinue 2 consecutive failures (arrangements scored 0).

Scoring For A, B, C, and D, scores are given with the directions. For items 1-7, scores are given in the Table and are based on 4 points for correct presentation, and up to 3 points bonus for speed of response. Points for accepted variations are also given in the Table. Subjects beginning with Demonstration-FIGHT who earn any points on items 1 or 2 should also be credited with 8 points for items A, B, C, and D.

Maximum score: 57 points.

SCORES FOR ITEMS 1-7 WITH TIME BONUSES INCLUDED

Arrangement	Time Limit	Correct Arrangement	Points with Time Bonus			
			7	6	5	4
1. Fire	45"	FIRE	1"-5"	6"-10"	11"-15"	16"-45"
2. Burglar	45"	THUG	1"-5"	6"-10"	11"-15"	16"-45"
3. Farmer	45"	QRST or SQRT	1"-5"	6"-10"	11"-15"	16"-45"
4. Picnic	45"	EFGH or EFHG	1"-5"	6"-10"	11"-15"	16"-45"
5. Sleeper	60"	PERCY	1"-10"	11"-15"	16"-20"	21"-60"
6. Gardener	75"	FISHER or FSIHER	1"-15"	16"-20"	21"-30"	31"-75"
7. Rain	75"	MASTER MSTEAR ASTEMR	1"-15"	16"-20"	21"-30"	31"-75" (2 points — no time bonus) (2 points — no time bonus)

BLOCK DESIGN

Directions

For Subjects under 8,
and older suspected
mental defectives.

Design A. Take four blocks in hand and say You see these blocks have different colors on their different sides. I am going to put them together

to make something with them. Watch me.¹

Arrange four blocks slowly as shown on the card. Then give *four other* blocks to the Subject and say Now make one just like mine. If the Subject fails, say Watch me again. Demonstrate a second time using the blocks just employed by the Subject. After the demonstration with the Subject's blocks, mix them up, leaving Examiner's blocks still together in the model and say Now you try it again and be sure to make it just like mine.²

The *time limit* allowed for the completion of each design is shown in seconds in the lower left-hand corner of the card. Timing for each attempt begins when the last word of the directions is given. In A, B and C begin timing again if the Subject is given a second chance.

Failure on an item can be either a faulty design or failure to complete the design in the allotted time. If on the *first* trial of A, B or C, time elapses before the design is finished, stop the Subject and give the second trial as prescribed for each of these items.²

Scoring 2 points for passing on first trial; 1 point for passing on second trial.

¹ To prevent the Subject from looking at the side of the block design instead of the top, the Examiner should construct the demonstrations so that the Subject is required to look down on the model. When the directions to the Subject have been given, the Examiner should move the block-model to a distance of approximately 7 inches from the Subject's edge of the table. If the Subject is right-handed, the block-model should be placed a little to the left of a line perpendicular to the Subject's body; to the right if the Subject is left-handed. It is important for the Examiner to see that the Subject is seated parallel to the edge of the table.

In laying out the blocks for the Subject, the Examiner should make sure that a variety of surfaces face up, that only one out of the four blocks has the red or red-white side facing up, and not more than two when nine blocks are used.

² Reversal of the design, for example, inversion of the pattern of the blocks on Design A so that the white blocks are placed next to the Subject and the red blocks are placed above them, is considered an error of design. Before giving the second trial, say But you see it goes this way. Rotate the Subject's blocks to conform to the model. The Subject is then asked to make the design again. If on the second trial he persists in his reversal, he is given 0 score; but if he corrects his reversal, he is given a second trial score of 1 point. This same procedure is followed on Designs B and C.

Design B. Brush up all of the blocks before continuing. Then assemble Design B behind a screen and present the model to the Subject in a completed form saying Now make one like this. Do it yourself. If the Subject fails on the first trial of Design B, brush up the Subject's blocks, and say Watch me do it. Leave the model before him, duplicating it with his blocks. After the demonstration brush up his blocks and say Now you try it.

Scoring 2 points for passing on first trial; 1 point for passing on second trial.

— Discontinue Failure on both trials of Design B.

Design C. If the Subject succeeds on either the first or the second trial of Design B, remove the blocks that served as a model and put in their place the card marked C.

Say This time we are going to put the blocks together by making them look like this picture. Watch me first. Construct the design slowly and when finished say You see, the top of these blocks looks the same as this picture. Brush up the blocks used in the demonstration and say Now you look at the picture and make one just like it with these blocks. Go ahead.

If the Subject fails to complete the design, brush up the blocks and say Watch me again. Make the design again; then brush up the blocks and say Go ahead. See if you can get it this time.

Scoring 2 points for passing on first trial; 1 point for passing on second trial.

— Discontinue Failure on both trials of Design C.

If the Subject passes on either the first or second trial of Design C continue the test beginning with Design 1 until the Subject fails 2 consecutive designs. (See directions for Designs 1-7 below.)

For Subjects 8 and older, not suspected mental defectives.

Directions See preceding footnote concerning layout of blocks. Use the card marked C and say You see these blocks have different colors on their different sides. They can be put together to make

a design like the one you see on this card. Watch me. Construct the design slowly. Then brush up the blocks and say Now make one like this. Go ahead. Tell me when you have finished. Provide the Subject with four blocks.

If the Subject fails on the first trial, give him a second trial, using the directions given above for the second trial of Design C.

If the Subject fails on both trials of Design C, administer Design A and B as for the younger Subjects. Then discontinue the test, giving whatever points are earned on Designs A and B.

Scoring 2 points for passing on first trial; 1 point for passing on second trial. If the Subject passes on either the first or the second trial of Design C, proceed with Design 1 and credit him with 4 points for Designs A and B.

Directions for
Designs 1-7 for
all ages.

Place the card, Design 1, before the Subject and say Now you make one like this. Provide the Subject with four blocks. Brush up the blocks when the Subject has obviously finished the design or at the end of the time limit. No second trials are given on Designs 1-7. Present the next design with — the remark Now make one like this. Proceed in a similar manner with the succeeding designs.

When Design 5 is reached, the Examiner takes the other five blocks out and says — Now make one like this, using 9 blocks.

Discontinue 2 consecutive failures.

Recording Time Record the time the Subject takes to complete each design, if it is within the time limit. Bonuses are given for rapid performances on correct designs. See Table for scores with time bonuses included.

Scoring — Designs 1-7 4 points of credit are given for successful completion of each design. No credit is given for partially correct or incomplete performances. See Table for scores with time bonuses included.

Maximum score: 55 points.

SCORES FOR DESIGNS 1-7 WITH TIME BONUSES INCLUDED

Points with Time Bonus

Designs	Time Limit	7	6	5	4
Design I	75"	1"-10"	11"-15"	16"-20"	21"-75"
Design II	75"	1"-10"	11"-15"	16"-20"	21"-75"
Design III	75"	1"-15"	16"-20"	21"-25"	26"-75"
Design IV	75"	1"-10"	11"-15"	16"-20"	21"-75"
Design V	150"	1"-35"	36"-45"	46"-65"	66"-150"
Design VI	150"	1"-55"	56"-65"	66"-80"	81"-150"
Design VII	150"	1"-55"	56"-65"	66"-90"	91"-150"

OBJECT ASSEMBLY

— All four Object Assembly items must be tried by each Subject. Directions are provided below for each object.

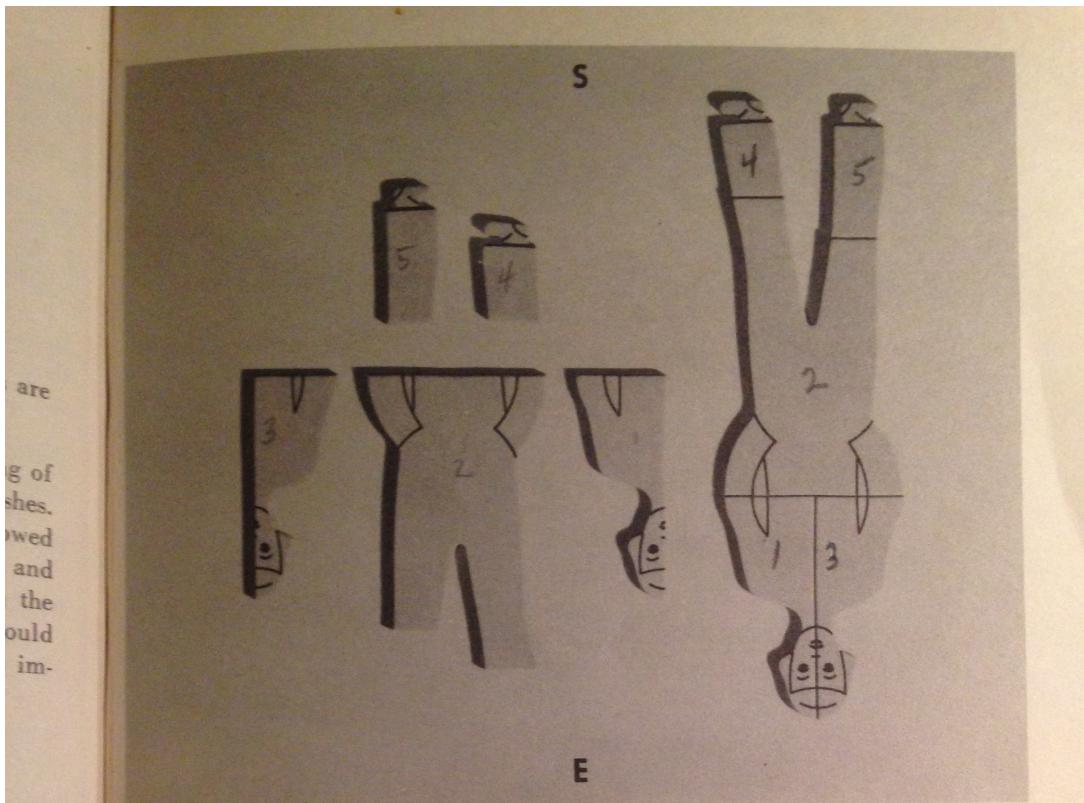
✓ It is important for the Examiner to be completely familiar with the scoring of the objects so he can compute the score for each as soon as the Subject finishes. Record the time it takes the Subject to arrange each item. Bonuses are allowed for rapid performances on perfect arrangements.* When the time elapses and the Subject is still working, the Examiner may not wish to stop him in the interests of maintaining good rapport and motivation; in these cases he should note the arrangement of the pieces at the end of the time limit. This is important since scores are given for partial arrangements.

Maximum score: 34 points.

SCORES FOR PERFECT ASSEMBLIES WITH TIME BONUSES INCLUDED

Object	Time Limit	Points with Time Bonus					
		9	8	7	6	5	4
MANIKIN	120"			1"-10"	11"-15"	16"-20"	21"-120"
HORSE	180"	1"-15"	16"-20"	21"-30"	31"-180"		
FACE	180"	1"-35"	36"-45"	46"-70"	71"-180"		
AUTO	180"	1"-25"	26"-30"	31"-45"	46"-180"		

✓ *IMPORTANT. Time bonuses are given ONLY to those Subjects having perfect performance scores.



MANIKIN

Directions Arrange the pieces behind a screen according to the diagram given.¹ Then say These pieces, if put together correctly, will make a boy. Go ahead and put them together. If a Subject turns a piece over, turn it right side up again unobtrusively.

20"

Timing 120 seconds. Record time.

Scoring Perfect performance: 4 points or more. See Table.

⁴⁴⁵
Legs interchanged, otherwise correct: 3 points

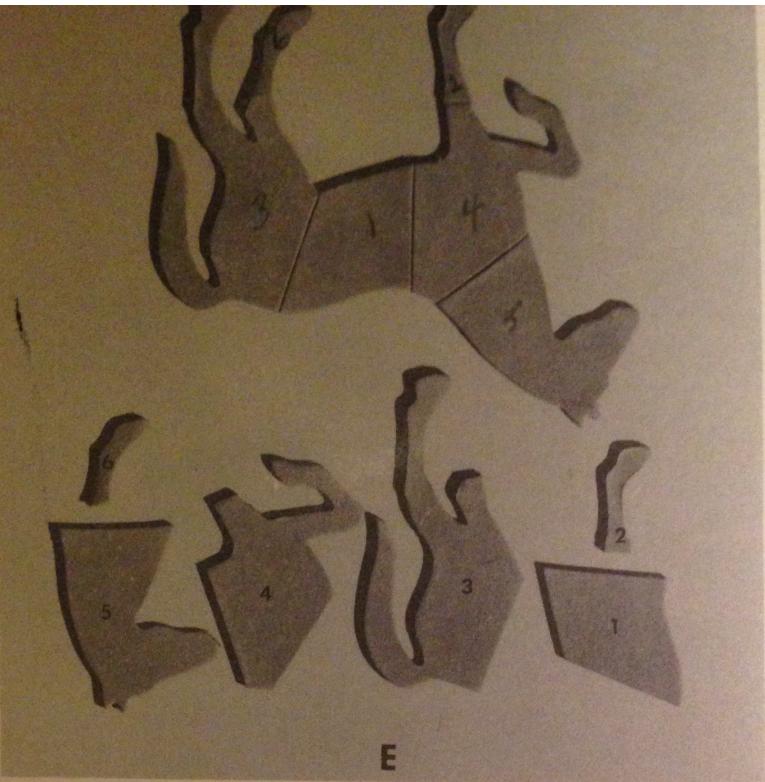
⁴⁴⁷
Legs inverted, otherwise correct: 3 points

Legs incorrectly placed as arms: 2 points

Legs omitted: 2 points

? Only trunk correct: 1 point

¹The diagram for each object shows the arrangement of the layout of pieces and the completed picture.



E

HORSE

Directions Arrange the pieces behind a screen according to the diagram given. Then say This is a cut up horse. Put the pieces together as quickly as you can.

Timing 180 seconds. Record time.

Scoring Perfect performance: 6 points or more. See Table.

Special arrangements:

Mid-piece (#1) inverted, otherwise correct: 5 points

Mid-piece omitted, otherwise correct: 4 points

Legs interchanged, or either hoof facing in wrong direction, otherwise correct: 4 points

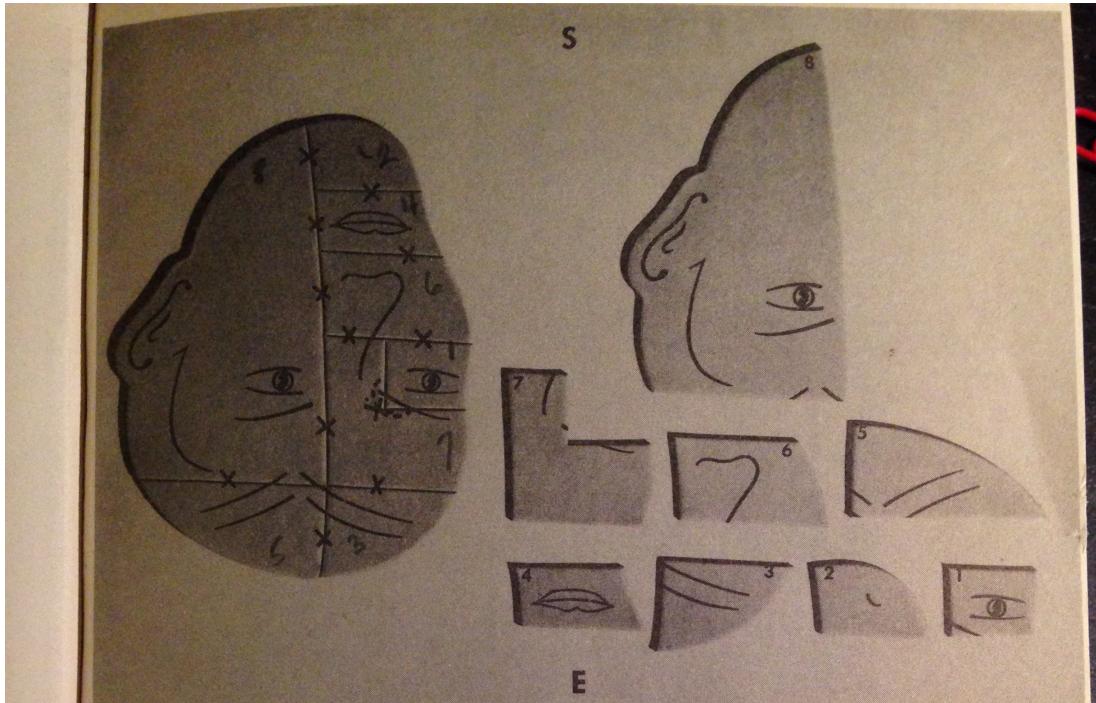
Mid-piece inverted and legs interchanged: 3 points

Two middle pieces interchanged (#1 and #4), otherwise correct: 2 points

Mid-piece omitted and legs interchanged: 2 points

Other arrangements: 1 point for each correct juxtaposition of one piece to another.

Examples: #3 joined to #6; #1 joined to #4.



FACE

Directions Arrange the pieces behind a screen according to the diagram given. Then say Put this together as quickly as you can. Note that the name of the object is not given.

Timing 180 seconds. Record the time.

Scoring Perfect performance: 6 points or more. See Table.

General: $\frac{1}{2}$ point for each correct juxtaposition of one piece to another piece. This rule remains the same whether the piece is forming part of the whole or several pieces are assembled away from the rest of the profile. The x's on the model profile show each point of contact that receives $\frac{1}{2}$ point. Examples:

Eye piece (#1) inverted in eyebrow segment (#7), otherwise correct: 5 points

Hair pieces (#3 and #5) omitted, otherwise correct: $4\frac{1}{2}$ points (record as 5)

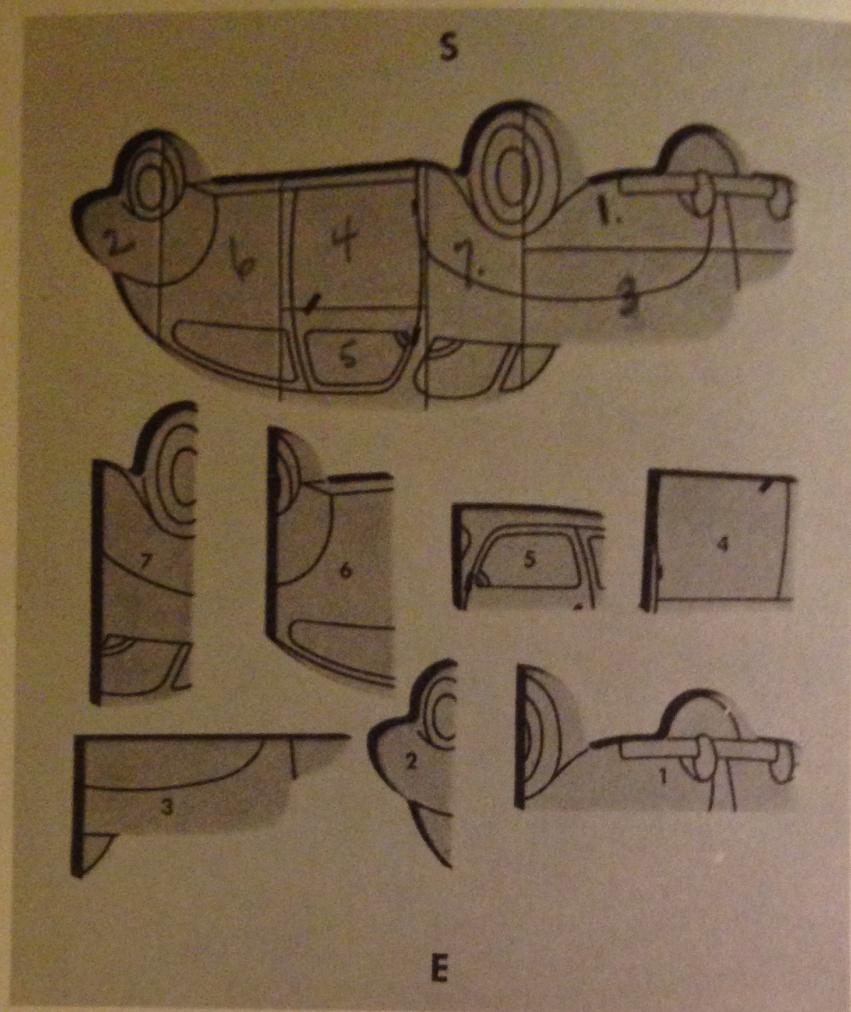
Nose piece omitted, otherwise correct: 4 points

Mouth piece (#4) and chin piece (#2) omitted, otherwise correct: 4 points

Face piece (#8) and hair piece (#5) omitted, otherwise correct: 3 points

Two hair pieces (#3 and #5) assembled to face (#8): 1 point

Chin piece (#2) assembled to face (#8); all other pieces omitted: $\frac{1}{2}$ point (record as 1).



AUTO

Directions Arrange the pieces behind a screen according to the diagram given. Then say Put this together as quickly as you can. The name of the object is not mentioned.

Timing 180 seconds. Record time.

Scoring Perfect performance: 6 points or more. See Table.

Special arrangements:

Door (#4) inverted or reversed, otherwise correct: 5 points

Pieces #4 and #5 omitted, otherwise correct: 4 points

Piece #7 omitted, otherwise correct: 4 points

Piece #7 omitted, #4 inverted or reversed, otherwise correct: 3 points

Pieces #4, #5, #7 omitted, the rest assembled into recognizable auto: 3 points

Pieces #4 and #5 interchanged with #6, otherwise correct: 3 points

+ Other arrangements: 1 point for each correct juxtaposition of one piece to another.

Examples:

Pieces #2, #6, #4 and #5 assembled correctly: 3 points

Pieces #1, #3 and #7 assembled correctly, others omitted: 2 points

Pieces #1 and #3; or pieces #2 and #6: 1 point.

CODING

CODING A

For Subjects* under 8 — regardless of estimated mental ability

Directions Give the Subject a pencil and say Look here and you will see a star, a ball, a triangle, and other things. See, the star has a line up and down like this pointing, the ball has two lines across pointing, the triangle has one line across like this pointing, the cross has a little circle in the center, and the box has two straight lines up and down.

Now look down below where you will see the balls, the stars, the boxes, and other things all mixed up but without any marks in them. I want you to fill in the things here with the same marks they have at the top. This is the way to do it: Here is a ball. Look up at the top and find the ball. You see it has two lines going this way pointing. So you put the two lines in this ball like this illustrate on the Sample. The star has one line going up and down, so you put the same mark in here illustrate. Now you do the other things.

The Subject is allowed to work alone on the remainder of the Sample figures. If he has difficulty or is slow in perceiving the task, pick out a figure the Subject has done wrong or is having difficulty with, and explain again. Such as You see, this is a triangle and it has a straight line in it, so you put that in here pointing. This is a cross, and since it has a little round thing in it you put it in the cross here. Now you do the rest of the figures. Go ahead. Begin timing. If the Subject starts to omit any figures or do only one type of figure, say Don't skip any. Do them in order.

Give no further assistance except when it is necessary to remind the Subject to go ahead until told to stop. If the Subject finishes ahead of the time limit, record his time.

Timing 120 seconds. Record time.

Scoring 1 point of credit for each figure filled in correctly. The five Sample figures are *not* included in the Subject's score. There are 45 figures.

For those Subjects receiving a *perfect* score of 45, additional points are given depending on the number of seconds taken to complete the test. See Table below.

Maximum score: 50 points.

SCORES INCLUDING TIME BONUS FOR PERFECT PERFORMANCE ON CODING A

Time in Seconds	Score	Time in Seconds	Score
70" or less	50	91"-100"	47
71"-80"	49	101"-110"	46
81"-90"	48	111"-120"	45

* For left-handed Subjects, see footnote on page 86.

CODING B

For Subjects* 8 and older — regardless of estimated mental ability

Directions Say Look at these divided boxes or squares pointing to the Key. Notice that each has a number on the upper part and a mark on the lower part. Every number has a different mark. Now look here pointing to the Sample where the boxes have numbers, but the squares beneath have no marks. I want you to put in each of these squares pointing to the seven Sample boxes the marks that should go there like this.

Illustrate by pointing to the Key and then to the Sample, saying Here is a 2, so put in this mark writing in the symbol. Here is a 1, so you put in this mark. This is a 4, so you put in this mark. After marking the first three Sample items, say Now you do it. If the Subject does not grasp the task, help him with more items until the seven Sample items have been filled in.

After this demonstration, say Now begin here and fill in as many squares as you can without skipping any. Keep working until I tell you to stop. Go ahead. Begin timing. If the Subject starts to omit squares or do only one type of figure, say Do them in order.

Timing 120 seconds.

Scoring 1 point for each square filled in correctly. The seven Sample items are *not* included in the Subject's score.

Maximum score: 93 points.

*Special directions for left-handed Subjects: Place a second record form before the Subject folded so the relevant code (A or B) is showing, since a left-handed Subject often covers the code with his hand when writing on the record form.

For Subjects under 8,
and older suspected
mental defectives.

out getting stuck. I am going to mark the path he takes with a pencil. Watch me.

Demonstrate by going up the blind alley at the right for a little distance, and then say You see, he would get stuck if he took this turn. He cannot walk through a wall, can he? He must go this way to get out.

Since the Subject is not permitted to take his pencil from the path in retracing after an error has been made or in planning a way out, it is important that the Examiner retrace the error he has made on the Sample Maze without taking his pencil from the path, except to indicate the wall. The Subject should be reminded as many times as it is necessary throughout the test that he should not take his pencil from the path. If he lifts the pencil, say Remember, keep your pencil point on the paper.

The first time a Subject crosses a line the Examiner should say You cannot go through a wall can you? No further admonition is given.

Maze A. After completing the demonstration, give the pencil to the Subject and say See if you can get out of this one yourself. Start with your pencil and draw the path you should take without getting stuck. Do not lift your pencil from the paper until you have finished. Go ahead. Start timing immediately. Time allowed each maze is printed on the Maze Sheet.

If the Subject succeeds on Maze A proceed to Maze B.

If the Subject fails Maze A or does not complete it within the time limit, say Let me help you and demonstrate the correct path before proceeding to Maze B.

Maze B. Whether the Subject has completed Maze A successfully or has required help, proceed to Maze B and say Now try this one. Begin here pointing to the figure and find your way out; be sure you do not get stuck. Go ahead. If the Subject fails Maze B after failing Maze A, discontinue the test. If the Subject fails Maze B after passing Maze A, demonstrate the correct path on Maze B and continue with Maze C.

Maze C. Point to the maze and say Now try to do this one which is a little harder. You begin here where the cross is and find your way out without getting stuck. Go ahead.

Discontinue the test if the Subject fails Mazes B and C. If he passes Maze B but fails Maze C, continue the test with Maze 1 and say Now start here

pointing to the cross and find your way out. Go ahead. Repeat this statement before each successive maze.

If the Subject fails Maze C and Maze 1, the test is discontinued.

Discontinue 2 consecutive failures (score of 0).

For Subjects 8 and older, not suspected mental defectives.

Directions Begin with Maze C. Say This is a maze. You are to start here pointing to cross and find your way out here pointing to exit without going up any blind alley or crossing any lines.

Do you understand? Give the Subject a pencil and continue All right. Start here and find your way out. Do not lift your pencil until you have finished. Go ahead. Start timing immediately. Time allowed each maze is printed on the test sheet.

If the Subject finds his way out and completes Maze C with not more than 1 error and within the time limit, give him full credit (4 points) for Mazes A and B, and such credit as he has earned for Maze C. Continue the test with Maze 1.

If the Subject completes Maze C with 2 or more errors, or fails to find his way out within the time limit, return to the Sample Maze and proceed with the test as with younger Subjects. In such cases, the Subject does not have a second trial on Maze C (if he passes Mazes A and B); it is scored according to his original performance.

Mazes 1 - 5. With each successive maze point to the cross and say Now start here and find your way out. Go ahead.

Discontinue 2 consecutive failures (score of 0).

The Table below shows the time limit and maximum number of errors allowed for each maze. The Subject fails a maze if he cannot reach the exit within the time limit or if his errors are more than the number allowed for that maze. Occasionally a Subject will draw a line through one or more walls directly to the exit; this is a complete failure.

Scoring Mazes A, B, and C:

Within the time limit and no errors: 2 points

Within the time limit and no more than allowed errors: 1 point

Mazes 1 - 5:

Within the time limit and no errors: 3 points

Within the time limit and only 1 error: 2 points

Within the time limit and 2 but no more than maximum number of allowed errors: 1 point

Maximum score: 21 points.

MAXIMUM ERRORS ALLOWED AND TIME LIMITS FOR EACH MAZE

	Errors Allowed	Time Limit
Maze A.....	2	30"
Maze B.....	2	30"
Maze C.....	2	30"
Maze 1.....	3	30"
Maze 2.....	3	45"
Maze 3.....	5	60"
Maze 4.....	6	120"
Maze 5.....	8	120"

Definition of Errors

1. In general, crossing an imaginary line into a major blind alley is 1 error. The particular blind alley entrances which are counted as places of error are marked with dotted lines on the Mazes in Appendix D. Any wandering around within a blind alley (which may itself have blind alleys) is part of the 1 error. Should the Subject return to the correct path and then re-enter the blind alley, it is a second error.
2. Crossing any line is 1 error. A line is crossed if any white space can be seen between the printed line and the pencil line on the wrong side of the printed line.
3. Lifting the pencil is 1 error. In order not to penalize the Subject twice, the pencil lifting error does not count if he does so to correct another error. For example, if after crossing a line the Subject lifts his pencil to return to the path, it is counted as only 1 error.

Scoring should be liberal if the Subject lacks the motor coordination to stay in the middle of the path and to turn sharp corners.

Table 8-3 WISC Full Scale, Verbal, and Performance IQ Scores for Experimental, Control, and Low Risk Contrast Children

Group Age (Mos)	Full Scale				Verbal				Performance		
	M	SD	Range	n	M	SD	Range	n	M	SD	Range
Experimental											
84	102.94	10.97	83.00-123.00	17	102.06	11.10	82.00-123.00	17	103.53	11.11	86.00-124.00
96	103.00	11.48	88.00-132.00	17	101.29	8.34	89.00-118.00	17	105.47	15.39	80.00-142.00
108	102.59	12.03	89.00-129.00	17	98.82	8.84	84.00-113.00	17	106.47	16.37	83.00-143.00
120	104.18	11.53	93.00-138.00	17	101.71	7.84	90.00-123.00	17	105.94	15.31	82.00-147.00
Control											
84	80.77	8.73	65.00- 93.00	17	81.82	7.20	69.00- 94.00	17	82.71	11.66	64.00-106.00
96	82.53	9.58	63.00-103.00	15	81.67	7.19	69.00-101.00	15	85.60	10.25	64.00-106.00
108	83.87	11.06	72.00-107.00	15	82.13	10.16	67.00-104.00	15	88.87	12.13	67.00-113.00
120	86.29	10.12	72.00-106.00	17	84.24	9.44	71.00-105.00	17	90.94	11.90	75.00-120.00
Low Risk Contrast											
84	102.50	12.96	91.00-125.00	8	102.50	12.12	90.00-120.00	8	101.63	14.18	86.00-129.00
96	99.83	10.70	86.00-112.00	6	99.83	12.77	79.00-114.00	6	100.17	10.46	85.00-111.00
108	102.33	12.37	86.00-121.00	6	102.33	14.14	90.00-129.00	6	101.50	11.04	85.00-118.00
120	102.33	7.87	89.00-111.00	6	101.00	7.59	94.00-114.00	6	103.50	10.48	86.00-115.00