

Grading Sheet 2015-2016 Math League Contests, Grades 5-6

Grading Guide

Second-Round, Jan – Feb 2016

一共 78 题，满分 782 分。

COMPLETE THE CUBE WITH ONE PIECE (QUESTIONS 1-5)

Question 1:

d

Question 2:

c

Question 3:

b

Question 4:

d

Question 5:

c

RECOGNIZING VIEWS OF A SOLID (QUESTIONS 6-7)

Question 6:

A-236: c

A-237: d

A-238: a

A-239: b

Question 7:

A-245: d

A-246: e

A-247: b

A-248: a
A-249: c

DIAGRAMMING CLASSES (QUESTIONS 8-13)

Question 8:

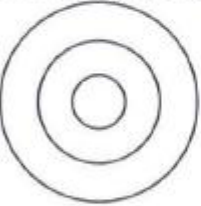
C-258 See Graphic



C-259 See Graphic



C-260 See Graphic



C-261 See Graphic



C-262 See Graphic



Question 9:

C-263 See Graphic



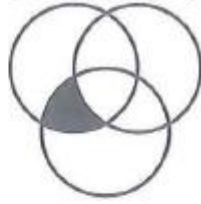
C-264 See Graphic



C-265 See Graphic



C-266 See Graphic



C-267 See Graphic



C-268 See Graphic



C-269 See Graphic



Question 10:

C-270 See Graphic



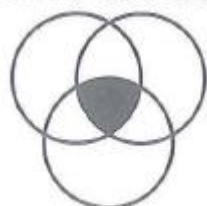
C-271 See Graphic



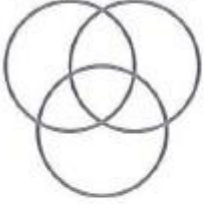
C-272 See Graphic



C-273 See Graphic



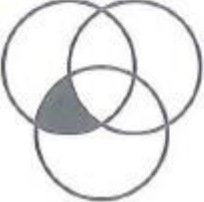
C-274 See Graphic



C-275 See Graphic



C-276 See Graphic

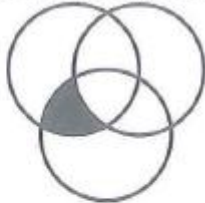


Question 11:

C-277 See Graphic



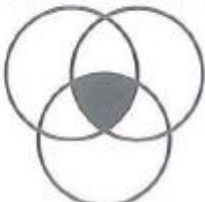
C-278 See Graphic



C-279 See Graphic



C-280 See Graphic



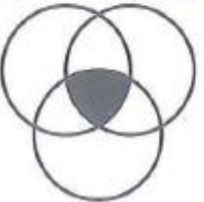
C-281 See Graphic



C-282 See Graphic



C-283 See Graphic



Question 12:

C-296 F
 C-298 B
 C-300 E

C-297 E
 C-299 C

Question 13:

C-301 B
 C-303 M
 C-305 J

C-302 D
 C-304 I

DRAWING TESSELLATING PATTERNS (QUESTIONS 14-17)

Question 14:

Yes.
 12, 12*4, 12*4*4, ... (答案不唯一)

Question 15:

Yes.
 3, 12, 12*4, 12*4*4, ... (答案不唯一)

Question 16:

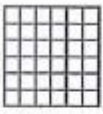

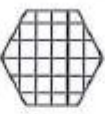





No.

Question 17:

No.

COMPLETING TRUE-FALSE TABLES (QUESTIONS 18-22)

Question 18:

Use these shades only ↓					
	FALSE	FALSE	FALSE	FALSE	TRUE
	FALSE	TRUE	FALSE	TRUE	FALSE
	TRUE	FALSE	TRUE	FALSE	FALSE

Question 19:

Use these shades only ↓					
	FALSE	FALSE	FALSE	FALSE	FALSE
	FALSE	FALSE	FALSE	FALSE	TRUE
	TRUE	TRUE	TRUE	TRUE	FALSE

Question 20:

Use these shades only ↓					
	FALSE	FALSE	FALSE	FALSE	TRUE
	TRUE	FALSE	TRUE	FALSE	FALSE
	FALSE	TRUE	FALSE	TRUE	FALSE

Question 21:

Use these shades only ↓					
	TRUE	FALSE	FALSE	FALSE	TRUE
	FALSE	FALSE	FALSE	FALSE	FALSE
	FALSE	TRUE	TRUE	TRUE	FALSE

Question 22:

Use these shades only ↓					
	FALSE	FALSE	FALSE	FALSE	TRUE
	TRUE	TRUE	FALSE	FALSE	FALSE
	FALSE	FALSE	TRUE	TRUE	FALSE

RECOGNIZING CONGRUENT PARTS (QUESTION 23)

Question 23:

Yes: a, b, d, f, h, i, k

No: c, e, g, j

CONGRUENCE AND SIMILARITY (QUESTIONS 24-34)

Question 24 (Matching Similar Figures):

A-95	c	A-96	e
A-97	a	A-98	d

Question 25 (Matching Similar Figures):

A-99	e	A-100	b
A-101	c	A-102	a
A-103	f		

Question 26 (Identifying Similarity and Congruence):

A-107	a. <u>N</u> ,	b. <u>N</u> ,	c. <u>C</u>
A-108	a. <u>N</u> ,	b. <u>S</u> ,	c. <u>N</u>
A-109	a. <u>N</u> ,	b. <u>C</u> ,	c. <u>S</u>
A-110	a. <u>C</u> ,	b. <u>C</u> ,	c. <u>C</u>
A-111	a. <u>C</u> ,	b. <u>C</u> ,	c. <u>S</u>

Identifying Enlargement and Reduction (Questions 27-34):

Questions 27-34 有两部分, 第一部分是选择题, (a) enlarged, (b) reduced. 第二部分是填空题。

Question 27 (Identifying Enlargement and Reduction):

reduced to $\frac{3}{4}$ times

Question 28 (Identifying Enlargement and Reduction):

enlarged to 2 times

Question 29 (Identifying Enlargement and Reduction):

enlarged to 2 times

Question 30 (Identifying Enlargement and Reduction):

reduced to $\frac{1}{2}$ times

Question 31 (Identifying Enlargement and Reduction):

enlarged to 2 times

Question 32 (Identifying Enlargement and Reduction):

reduced to $\frac{1}{2}$ times

Question 33 (Identifying Enlargement and Reduction):

enlarged to 1.5 times

Question 34 (Identifying Enlargement and Reduction):

reduced to $\frac{3}{4}$ times

FOLLOWING DIRECTIONS (QUESTIONS 35 - 42)

Question 35:

a

Question 36:

c

Question 37:

C

Question 38:

b

Question 39:

B

Question 40:

C

Question 41:

- a. lower right
- c. upper left

b. lower left

Question 42:

- a. lower right
- c. lower left

- b. upper right
- d. upper left

STACKING SHAPES (QUESTIONS 43-48)

Question 43:

- | | | | |
|------|---|------|---|
| B-39 | f | B-40 | c |
| B-41 | a | B-42 | g |

Question 44:

- | | | | |
|------|---|------|---|
| B-43 | g | B-44 | d |
| B-45 | b | B-46 | a |
| B-47 | h | B-48 | e |
| B-49 | c | | |

Question 45:

- | | | | |
|------|---|------|---|
| B-50 | f | B-51 | c |
| B-52 | b | B-53 | d |

Question 46:

- | | |
|-------------|-------------|
| a. triangle | b. triangle |
|-------------|-------------|

Question 47:

- | | |
|--------------|-----------|
| a. rectangle | b. circle |
| c. triangle | |

Question 48:

- | | |
|--------------|-----------|
| a. rectangle | b. square |
| c. hexagon | |

DESCRIBING LOCATIONS ON A GRID (QUESTIONS 49-52)

Question 49:

- | | | | |
|-------|-------|-------|------|
| B-106 | four | B-107 | four |
| B-108 | eight | B-109 | four |
| B-110 | four | | |

Question 50:

- | | | | |
|-------|-----------|-------|-----------|
| B-111 | northwest | B-112 | southwest |
| B-113 | southeast | B-114 | northeast |

Question 51:

- | | | | |
|-------|-----------|-------|-----------|
| B-117 | southwest | B-118 | southeast |
| B-119 | northeast | B-120 | northeast |
| B-121 | southwest | B-122 | northwest |
| B-123 | south | | |

Question 52:

- | | | | |
|-------|-----------|-------|-----------|
| B-124 | southeast | B-125 | southwest |
| B-126 | northeast | | |

DESCRIBING LOCATIONS AND DIRECTIONS WITH MAPS (QUESTIONS 53-58)

Question 53:

a. Q b. R

Question 54:

B-128 "D", Fourth
B-129 "B", Second

Question 55:

B-130 "D", Third
B-131 three
B-132 "B", Fourth

Question 56:

Point P northeast
Point R southeast
Point Q northwest
Point S southwest

Question 57:

B-137 3, east B-138 5, north
B-139 6

Question 58:

B-141 4, south B-142 8

Question 59:

B-162 three B-163 16 miles
B-164 16 miles B-165 15 square miles
B-166 16 square miles

Question 60:

B-168 11 miles B-169 5 miles
B-170 6 miles

Question 61:

B-172 2 miles B-173 west
B-174 18 miles

Question 62:

- | | | | |
|-------|----------|-------|----------|
| B-175 | truce | B-176 | graduate |
| B-177 | harvest | B-178 | adult |
| B-179 | terminal | B-180 | wilt |
| B-181 | occupy | | |

Question 63:

- | | | | |
|-------|--------------|-------|-------------|
| B-182 | succeed | B-183 | determine |
| B-184 | following | B-185 | conclude |
| B-186 | expenditures | B-187 | consequence |
| B-188 | conclude | | |

Question 64:

- B-189 read, memorize, recite
B-190 design, manufacture, distribute
- B-191 beforehand, presently, afterward
B-192 read, deliberate, believe
B-193 examine, choose, purchase or choose,
examine, purchase
B-194 plan, action, consequence
B-195 obsolete, recent, current

Question 65:

- B-196 measure, mark, cut
B-197 primary, intermediate, secondary
B-198 research, outline, write
B-199 exploration, discovery, colonization or
discovery, exploration, colonization
B-200 designing, engineering, contracting or designing,
contracting, engineering
B-201 stress, crack, crumble
B-202 defrost, cook, serve

Question 66:

- | | | | |
|-------|----------|-------|----------|
| B-221 | abundant | B-222 | deny |
| B-223 | actual | B-224 | devotion |
| B-225 | argue | B-226 | compel |

Question 67:

- | | | | |
|-------|---------|-------|-----------|
| B-227 | retreat | B-228 | frantic |
| B-229 | unique | B-230 | essential |
| B-231 | untied | B-232 | order |

Question 68:

- B-233** regulate, limit, prohibit
- B-234** dislike, reject, shun
- B-235** excited, violent, savage
- B-236** contempt, criticism, acceptance or acceptance, criticism, contempt
- B-237** dull, lustrous, vivid
- B-238** significant, urgent, vital

Question 69:

- B-239** chimpanzee, baboon, gorilla
- B-240** candle, bulb, beacon
- B-241** traitor, citizen, patriot
- B-242** typical, admirable, ideal
- B-243** dissatisfied, grouchy, hostile
- B-244** security, risk, peril or peril, risk, security
- B-245** deny, suggest, confirm or confirm, suggest, deny
- B-246** extinct, rare, common or common, rare, extinct

Question 70:

B-281 See Graphic

	B	C	F	J
1	N	N	N	Y
2	N	N	Y	N
4	Y	N	N	N
6	N	Y	N	N

Question 71:

B-282 See Graphic

	C	Sh	SU	T
49	Y	N	N	N
75	N	Y	N	N
88	N	N	N	Y
100	N	N	Y	N

Question 72:

B-283 See Graphic

	Running Speed km/hr			
	38	64	79	112
Cheetah	N	N	N	Y
Deer	N	N	Y	N
Elephant	Y	N	N	N
Fox	N	Y	N	N

Question 73:

B-284 See Graphic

	Orbit Time in yrs.			
	1/4	2/3	11	248
Jupiter	N	N	Y	N
Mercury	Y	N	N	N
Pluto	N	N	N	Y
Venus	N	Y	N	N

Question 74:

B-285 See Graphic

	K	S	T	W
Chile	N	N	N	Y
Czech Republic	N	Y	N	N
Russia	N	N	Y	N
Zambia	Y	N	N	N

Question 75:

B-286 See Graphic

	B	F	J	R
Collie	N	N	Y	N
Great Dane	N	Y	N	N
German Shepherd	Y	N	N	N
Dachshund	N	N	N	Y

Question 76:

	F	K	R	T
B	Y	N	N	N
L	N	N	N	Y
M	N	Y	N	N
P	N	N	Y	N

Question 77:

	E	F	G	S
B	Y	N	N	N
C	N	N	Y	N
L	N	N	N	Y
P	N	Y	N	N

Question 78:

FIRST NAMES			SPORT	LAST NAMES		
G	J	S		C	R	W
N	Y	N	Basketball	N	N	Y
Y	N	N	Football	N	Y	N
N	N	Y	Swimming	Y	N	N