5th Grade Math
Study Guide Measurement

Name: $\qquad$ Date: $\qquad$
Name which value the arrow is pointing to on the ruler.
1.

2.

3.

4.

5.

6.

7.

8.

9.

10.


Name the length of each segment.
11.

12.

13.

14.

15.

16.

17.

18.

19.

20.


Convert.
21. 7 feet $=$ $\qquad$ inches
23. 6 feet $=\ldots$ inches
22. 5 feet $=$ $\qquad$ inches
24. 9 feet $=$ $\qquad$ inches
25. 3 feet $=\ldots$ inches
26. 2 feet $=\ldots$ inches
27. 4 feet $=$ $\qquad$ inches
28. 8 feet $=\ldots$ inches
29. 7 feet $=$ $\qquad$ inches
30. 5 feet $=\ldots$ inches
31. 15 feet $=$ $\qquad$ yards
32. 30 feet $=\ldots$ yards
33. 18 feet $=$ $\qquad$ yards
34. 6 feet $=\ldots$ yards
35. 9 feet $=$ $\qquad$ yards
36. 12 feet $=\ldots$ yards
37. 27 feet $=$ $\qquad$ yards
38. 21 feet $=$ $\qquad$ yards
39. 24 feet $=$ $\qquad$ yards
40. 18 feet $=\ldots$ yards
41. 8 yards $=\ldots$ inches
42. 3 yards $=\ldots$ inches
43. 4 yards $=\ldots$ inches
44. 5 yards $=\ldots \quad$ inches
45. 2 yards $=\ldots$ inches
46. 6 yards $=$ __ inches
47. 9 yards $=\ldots$ inches
48. 12 yards = __ inches
49. 10 yards $=\ldots$ inches
50.7 yards $=\ldots$ inches
51. 10 yards $=$ $\qquad$ feet
52. 3 yards $=\ldots$ feet
53. 4 yards $=$ $\qquad$ feet
54. 7 yards $=$ feet
55. 12 yards $=\ldots$ feet
56. 2 yards = __ feet
57. 9 yards = $\qquad$ feet

Name the length of each segment.
61.

62.

63.

64.

65.

58. 11 yards = __ feet
59. 5 yards $=\ldots$ feet
60.8 yards $=\ldots \quad$ feet 66.

67.

68.

69.

70.

71.

72.

73.

74.

75.


## Convert.

81. 3,300 centimeters $=$ $\qquad$ meters
82. 5,100 centimeters $=$ $\qquad$ meters
83. 4,300 centimeters $=$ $\qquad$ meters
84. 7,600 centimeters $=$ $\qquad$ meters
85. 


77.

78.

79.

80.

85. 700 centimeters $=\ldots$ meters
86. 4,800 centimeters $=\ldots$ meters
87. 6,500 centimeters $=\ldots$ meters
88. 2,300 centimeters $=$ $\qquad$ meters
89. 4,700 centimeters $=$ $\qquad$ meters 100. 2 kilometers = __ meters
90. 2,100 centimeters $=$ $\qquad$ meters
101. 4 tons to pounds.
91. 8 kilometers $=$ $\qquad$ meters
102. 6 tons to pounds.
92. 9 kilometers $=$ $\qquad$ meters
103. 9 tons to pounds.
104. 8 tons to pounds.
93. 4 kilometers $=$ $\qquad$ meters
105. 12 tons to pounds.
94. 5 kilometers $=$ $\qquad$ meters
106. 7 tons to pounds.
95.7 kilometers $=$ $\qquad$ meters
107. 3 tons to pounds.
96. 6 kilometers $=$ $\qquad$ meters
108. 5 tons to pounds.
97. 10 kilometers $=$ $\qquad$ meters
109. 11 tons to pounds.
98. 11 kilometers $=$ $\qquad$ meters
110. 2 tons to pounds.
99. 12 kilometers $=$ $\qquad$ meters
111. A puppy weighs about 7 pounds. How many ounces are in seven pounds?
112. An orca weighs about 5 tons. How many pounds are in five tons?
113. An elephant weighs about 7 tons. How many pounds are in seven tons?
114. A package weighs about 6 pounds. How many ounces are in six pounds?
115. A truck weighs about 9 tons. How many pounds are in nine tons?
116. A suitcase weighs about 8 pounds. How many ounces are in eight pounds?
117. An orca weighs about 8 tons. How many pounds are in eight tons?
118. A box weighs about 4 pounds. How many ounces are in four pounds?
119. A blue whale weighs about 4 tons. How many pounds are in four tons?
120. A book weighs about 6 pounds. How many ounces are in six pounds?
121. 48 ounces to pounds.
126. 112 ounces to pounds.
122. 160 ounces to pounds.
127. 64 ounces to pounds.
123. 192 ounces to pounds.
128. 176 ounces to pounds.
124. 144 ounces to pounds.
129. 96 ounces to pounds.
125. 128 ounces to pounds.
130. 80 ounces to pounds.
131. A truck weighs about 4 tons. How many pounds are in four tons?
132. An elephant weighs about 7 tons. How many pounds are in seven tons?
133. A hippo weighs about 6 tons. How many pounds are in six tons?
134. A baby blue whale weighs about 3 tons. How many pounds are in three tons?
135. An orca weighs about 5 tons. How many pounds are in five tons?
136. A hippo weighs about 8 tons. How many pounds are in eight tons?
137. An elephant weighs about 2 tons. How many pounds are in two tons?
138. A baby blue whale weighs about 9 tons. How many pounds are in nine tons?
139. A truck weighs about 4 tons. How many pounds are in four tons?
140. An orca weighs about 7 tons. How many pounds are in seven tons?

| 141. 7 kilograms $=$ | grams | 151. 9,000 milligrams $=$ | grams |
| :---: | :---: | :---: | :---: |
| 142.9 9 kilograms $=$ | grams | 152. 4,000 milligrams $=$ | grams |
| 143. 10 kilograms $=$ | grams | 153. 7,000 milligrams $=$ | grams |
| 144. 3 kilograms $=$ | grams | 154. 2,000 milligrams $=$ | grams |
| 145. 4 kilograms $=$ | grams | 155. 14,000 milligrams $=$ | grams |
| 146. 12 kilograms = | grams | 156. 3,000 milligrams $=$ | grams |
| 147. 11 kilograms $=$ | grams | 157. 11,000 milligrams $=$ | grams |
| 148. 2 kilograms = | grams | 158. 10,000 milligrams | grams |
| 149. 6 kilograms $=$ | grams | 159. 6,000 milligrams $=$ | grams |
| 150. 5 kilograms $=$ | grams | 160. 15,000 milligrams $=$ | grams |

161. 18,000 grams $=\ldots$ kilograms
162. 49,000 grams $=\ldots$ kilograms
163. 98,000 grams $=\ldots$ kilograms
164. 66,000 grams $=\ldots$ kilograms
165. 20,000 grams $=$ __ kilograms
166. 5,000 grams $=$ __ kilograms
167. 31,000 grams $=\ldots$ kilograms
168. 46,000 grams $=\ldots$ kilograms
169. 77,000 grams $=\ldots$ kilograms -
170. 36,000 grams $=$ kilograms
171. 325 grams $=\ldots$ milligrams
172. 2,950 grams $=\ldots$ milligrams
173. 1,484 grams $=\ldots$ milligrams
174. 770 grams $=$ $\qquad$ milligrams
175. 1,992 grams $=$ milligrams
176. 566 grams $=\ldots$ milligrams
177. 1,948 grams $=\ldots$ milligrams
178. 1,270 grams $=\ldots$ milligrams
179. 305 grams $=\ldots$ milligrams
180. 2,103 grams $=$ $\qquad$ milligrams
181. 36 quarts to gallons.
182. 12 quarts to gallons.
183. 5 quarts to pints.
184. 28 quarts to gallons.
185. 3 quarts to pints.
186. 9 quarts to pints.
187. 7 quarts to pints.
188. 20 quarts to gallons.
189. 36 quarts to gallons.
190. 12 quarts to gallons.
191. 26 cups to quarts.
192. 17 pints to gallons.
193. 16 pints to gallons.
194. 22 cups to quarts.
195. 12 cups to quarts.
196. 19 pints to gallons.
197. 11 pints to gallons.
198. 18 cups to quarts.
199. 50 liters $=\ldots$ milliliters
200. 21 cups to quarts.
201. 14 pints to gallons.
202. $4,450,000$ milliliters $=\ldots$ liters
203. 6,830 milliliters $=$ $\qquad$ liters
204. 904,000 milliliters $=\ldots$ liters
205. 30,200 milliliters $=$ $\qquad$ liters
206. 64,700 milliliters $=$ $\qquad$ liters
207. 2,730 milliliters $=\ldots$ liters
208. $9,440,000$ milliliters $=$ $\qquad$ liters
209. 32 liters $=\ldots$ milliliters
210. 30 liters $=\ldots$ milliliters
211. 4,580 milliliters $=$ $\qquad$ liters
212. 564,000 milliliters $=\ldots$ liters
213. $6,720,000$ milliliters $=$ $\qquad$ liters ,都
214. 9,40,00 milliners
$\square$
$\square$ -

215. 34 liters $=\ldots$ milliliters
216. 18 liters $=\ldots$ milliliters
217. 39 liters $=\ldots$ milliliters
218. 26 liters $=\ldots$ milliliters
219. 43 liters $=\ldots$ milliliters
220. 46 liters $=\ldots$ milliliters
221. 16 liters $=$ $\qquad$ milliliters
222. How many liters are in 4 kiloliters?
223. How many liters are in 7 kiloliters?
224. How many liters are in 9 kiloliters?
225. How many liters are in 3 kiloliters?
226. How many liters are in 12 kiloliters?

Find the temperature.
231.

$\qquad$
232.


234.

236.


238.


## Convert.

241. 12 hours $=$ $\qquad$ minutes

242. 


$\qquad$
242. 840 minutes $=$ $\qquad$ hours
243. 900 minutes $=$ $\qquad$ seconds
244. 90 months $=$ $\qquad$ years
245. 9 years 3 months $=$ $\qquad$ months
246. 5 hours $=$ $\qquad$ seconds

Find the elapsed time.
251. from 7:51 pm to 7:03 am
252. from 11:14 am to 6:20 pm
253. from 9:31 pm to 3:22 am
254. from 6:23 pm to 5:56 am
255. from 8:07 am to 1:51 pm

Find the Perimeter.
261.

262.

263.

264.

265.

256. from 7:22 pm to 11:32 am
257. from 8:03 am to 8:00 pm
258. from 11:00 am to 7:34 pm
259. from 11:56 am to 5:20 pm
260. from $10: 36 \mathrm{pm}$ to $1: 28 \mathrm{am}$
266.

269.

267.


6 in.
270.

268.


Find the Area.
271.

272.

274.

275.


11 ft
278.

279.

280.


Solve.
281. Tim ran the marathon in 4 hours 13 min . Neil ran it in 310 min . Who ran the marathon in less time?
282. If David jogs once around the $2 \frac{1}{2}$ mile perimeter of the lake 6 days a week and twice on Sundays, how many miles does David jog in one week?
283. The carnival began at 11:15 am and ended at 10:45 pm. How long did it last?
284. Last week the average temperature was $32^{\circ} \mathrm{F}$. This week the temperature each day was $25^{\circ} \mathrm{C}$, $23^{\circ} \mathrm{C}, 20^{\circ} \mathrm{C}, 22^{\circ} \mathrm{C}, 22^{\circ} \mathrm{C}, 18^{\circ} \mathrm{C}$, and $17^{\circ} \mathrm{C}$. How many degrees did the average temperature decrease?
[1] $1 \frac{1}{4} \mathrm{in}$.
[2] $3 \frac{1}{2} \mathrm{in}$.
[3] $1 \frac{1}{2} \mathrm{in}$.
[4] $2 \frac{1}{2} \mathrm{in}$.
[5] $2 \frac{3}{8} \mathrm{in}$.
[6] $1 \frac{7}{8} \mathrm{in}$.
[7] $2 \frac{1}{4} \mathrm{in}$.
[8] $3 \frac{7}{8} \mathrm{in}$.
[9] $3 \frac{3}{4} \mathrm{in}$.
[10] $1 \frac{3}{4} \mathrm{in}$.
[11] $\frac{13}{16} \mathrm{in}$.
[12] $2 \frac{13}{16}$ in.
[13] $\frac{9}{16}$ in.
[14] $3 \frac{1}{16}$ in.
[15] $1 \frac{11}{16} \mathrm{in}$.
[16] $\frac{3}{16} \mathrm{in}$.
[17] $\frac{5}{16} \mathrm{in}$.
[18] $1 \frac{1}{16} \mathrm{in}$.
[19] $1 \frac{3}{16}$ in.
[20] $2 \frac{11}{16}$ in.
[21] 84 in
[22] 60 in
[23] 72 in
[24] 108 in
[25] 36 in
[26] 24 in
[27] 48 in
[28] 96 in
[29] 84 in
[30] 60 in
[31] 5 yds
[32] 10 yds
[33] 6 yds
[34] 2 yds [35] 3 yds
[42] 108
[43] 144
[36] 4 yds
[37] 9 yds
[38] 7 yds
[39] 8 yds [40] 6 yds [41] 288
[44] 180
[45] 72
[46] 216
[47] 324
[48] 432
[49] 360
[50] 252
[51] 30
[52] 9
[53] 12
[54] 21
[55] 36
[56] 6
[57] 27
[58] 33
[59] 15
[60] 24
[61] 50 mm
[62] 49 mm
[63] 44 mm
[64] 16 mm
[65] 51 mm
[66] 27 mm
[67] 54 mm
[68] 42 mm
[69] 45 mm
[70] 29 mm
[71] 2 cm
[72] 5 cm
[73] 3 cm
[74] 4 cm
[75] 1 cm
[76] 2 cm
[77] 5 cm
[78] 3 cm
[79] 4 cm
[80] 1 cm
[81] 33
[82] 51
[83] 43
[84] 76
[85] 7
[86] 48
[87] 65
[88] 23
[89] 47
[90] 21
[91] 8,000
[92] 9,000
[93] 4,000
[94] 5,000
[95] 7,000
[96] 6,000
[97] 10,000
[98] 11,000
[99] 12,000
[100] 2,000
[101] 8,000 lbs [102] 12,000 lbs
[103] 18,000 lbs [104] 16,000 lbs [105] 24,000 lbs [106] 14,000 lbs [107] 6,000 lbs [108] 10,000 lbs [109] 22,000 lbs [110] $4,000 \mathrm{lbs}$ [111] 112 oz [112] $10,000 \mathrm{lbs}$ [113] 14,000 lbs [114] 96 oz [115] 18,000 lbs [116] 128 oz [117] $16,000 \mathrm{lbs}$ [118] 64 oz [119] 8,000 lbs [120] 96 oz [121] 3 lb [122] 10 lb [123] 12 lb [124] 9 lb [125] 8 lb

| [126] 7 lb | [149] 6,000 | [172] 2,950,000 |
| :---: | :---: | :---: |
| [127] 4 lb | [150] 5,000 | [173] 1,484,000 |
| [128] 11 lb | [151] 9 | [174] 770,000 |
| [129] 6 lb | [152] 4 | [175] 1,992,000 |
| [130] 5 lb | [153] 7 | [176] 566,000 |
| [131] 8,000 lbs | [154] 2 | [177] 1,948,000 |
| [132] 14,000 lbs | [155] 14 | [178] 1,270,000 |
| [133] 12,000 lbs | [156] 3 | [179] 305,000 |
| [134] 6,000 lbs | [157] 11 | [180] 2,103,000 |
| [135] 10,000 lbs | [158] 10 | [181] 9 gal |
| [136] 16,000 lbs | [159] 6 | [182] 3 gal |
| [137] 4,000 lbs | [160] 15 | [183] 10 pt |
| [138] 18,000 lbs | [161] 18 | [184] 7 gal |
| [139] 8,000 lbs | [162] 49 | [185] 6 pt |
| [140] 14,000 lbs | [163] 98 | [186] 18 pt |
| [141] 7,000 | [164] 66 | [187] 14 pt |
| [142] 9,000 | [165] 20 | [188] 5 gal |
| [143] 10,000 | [166] 5 | [189] 9 gal |
| [144] 3,000 | [167] 31 | [190] 3 gal |
| [145] 4,000 | [168] 46 | [191] $6 \frac{1}{2} q t$ |
| [146] 12,000 | [169] 77 | [192] $2 \frac{1}{8} \mathrm{gal}$ |
| [147] 11,000 | [170] 36 |  |
| [148] 2,000 | [171] 325,000 | [193] 2 gal |

[194] $5 \frac{1}{2}$ qt [195] 3 qt [196] $2 \frac{3}{8} \mathrm{gal}$ [197] $1 \frac{3}{8} \mathrm{gal}$ [198] $4 \frac{1}{2}$ qt [199] $5 \frac{1}{4}$ qt [200] $1 \frac{3}{4} \mathrm{gal}$ [201] 4,450 L
[202] 6.83 L
[203] 904 L
[204] 30.2 L
[205] 64.7 L
[206] 4.58 L
[207] 564 L
[208] 6,720 L
[209] 2.73 L
[210] 9,440 L
[211] 32,000
[212] 30,000
[213] 50,000
[214] 34,000
[215] 18,000
[216] 39,000
[217] 26,000
[218] 43,000
[219] 46,000
[220] 16,000
[221] 4,000 L
[222] 7,000 L
[223] 9,000 L
[224] 3,000 L
[225] 12,000 L
[226] 8,000 L
[227] 11,000 L
[228] 5,000 L
[229] 2,000 L
[230] 10,000 L
[231] $-6^{\circ} \mathrm{F}$
[232] $16^{\circ} \mathrm{F}$
[233] $-4^{\circ} \mathrm{F}$
[234] $14^{\circ} \mathrm{F}$
[235] $12^{\circ} \mathrm{F}$
[236] $8^{\circ} \mathrm{F}$
[237] $28^{\circ} \mathrm{F}$
[238] $10^{\circ} \mathrm{F}$
[239] $4^{\circ} \mathrm{F}$
[240] $2^{\circ} \mathrm{F}$
[241] 720 minutes
[242] 14 hours
[243] 54,000 seconds
[244] $7 \frac{1}{2}$ years
[245] 111 months
[246] 18,000 seconds
[247] 228 hours
[248] $9 \frac{1}{2}$ days
[249] 435 seconds
[250] 8 min 20 seconds
[251] 11 hours 12 min .
[252] 7 hours 6 min.
[253] 5 hours 51 min
[254] 11 hours 33 minutes
[255] 5 hours 44 minutes
[256] 16 hours 10 minutes
[257] 11 hours 57 minutes
[258] 8 hours 34 minutes
[259] 5 hours 24 minutes
[260] 2 hours 52 minutes
[261] 18 m
[262] 36 m
[263] 28 yd
[264] 16 ft
[265] 20 ft
[266] 24 ft
[267] 28 in
[268] 32 m
[269] 26 ft
[270] 28 ft
[271] $75 \mathrm{yd}^{2}$
[272] 49 in $^{2}$
[273] 96 in $^{2}$
[274] $25 \mathrm{yd}^{2}$
[275] $99 \mathrm{ft}^{2}$
[276] $100 \mathrm{in}^{2}$
[277] $98 \mathrm{yd}^{2}$
[278] 36 yd $^{2}$
[279] 40 in $^{2}$
[280] $81 \mathrm{in}^{2}$
[281] Tim runs it in 253 minutes.
[282] 20 miles
[283] 11 hours 30 minutes
[284] $11^{\circ}$

