3. Use the information in Table 1 to fill out Table 2.

Table 2. The amount of different food types in alligator stomachs

Food type	Number of stomachs	Number of food items
Crabs		
Small fishes		
Big fishes		
Snails		
Birds		
Mammals		
Reptiles		
Plants		
Human objects		

4. **Data Analysis** Use the following formulas to fill out Table 3.

$$Frequency\ \% = \frac{Number\ of\ stomachs\ with\ a\ particular\ food\ type}{Total\ number\ of\ stomachs\ with\ any\ food\ present}$$

$$Number\ \% = \frac{Total\ number\ of\ a\ particular\ food\ item\ in\ stomachs\ of\ all\ alligators}{Total\ number\ of\ food\ items\ from\ all\ alligator\ stomachs\ combined}$$

Table 3. Two measures of the relative importance of different food types to the diets of alligators in the Shark River Estuary

Food type	Frequency (%)	Number (%)
Crabs		
Small fishes		
Big fishes		
Snails		
Birds		
Mammals		
Reptiles		
Plants		
Human objects		

9. **Data Analysis** Calculate the trophic level of the following organisms to complete the table, using the following formula:

$$Trophic\ level = 1 + \frac{\delta^{15}N\ for\ organism - \delta^{15}N\ for\ primary\ producer}{3}$$

Table 4. $delta^{15}N$ values and trophic levels of organisms in the Shark River estuary. The lengths of individuals sampled are given in parentheses.

Organism	delta¹⁵N	Trophic level
Mangrove	2.0	1
Phytoplankton	2.0	1
Herbivorous snail	5.0	2
Florida gar (fish 35-50 cm long fish)	11.0	
Snook (fish 50-70 cm long)	12.0	
Juvenile bull shark (70-120 cm long)	12.5	
American crocodile (320 cm)	14.0	
Alligator (150 cm)	8	
Alligator (235 cm)	9	
Alligator (265 cm)	8.5	
Alligator (185 cm)	9.5	
Alligator (270 cm)	9	
Alligator (220 cm)	8	
Alligator (195 cm)	8.5	
Alligator (240 cm)	9	
Alligator (160 cm)	9.5	
Alligator (250 cm)	8	
Alligator average	8.7	