

# 5 S Formalisms



# More formally: Definitions

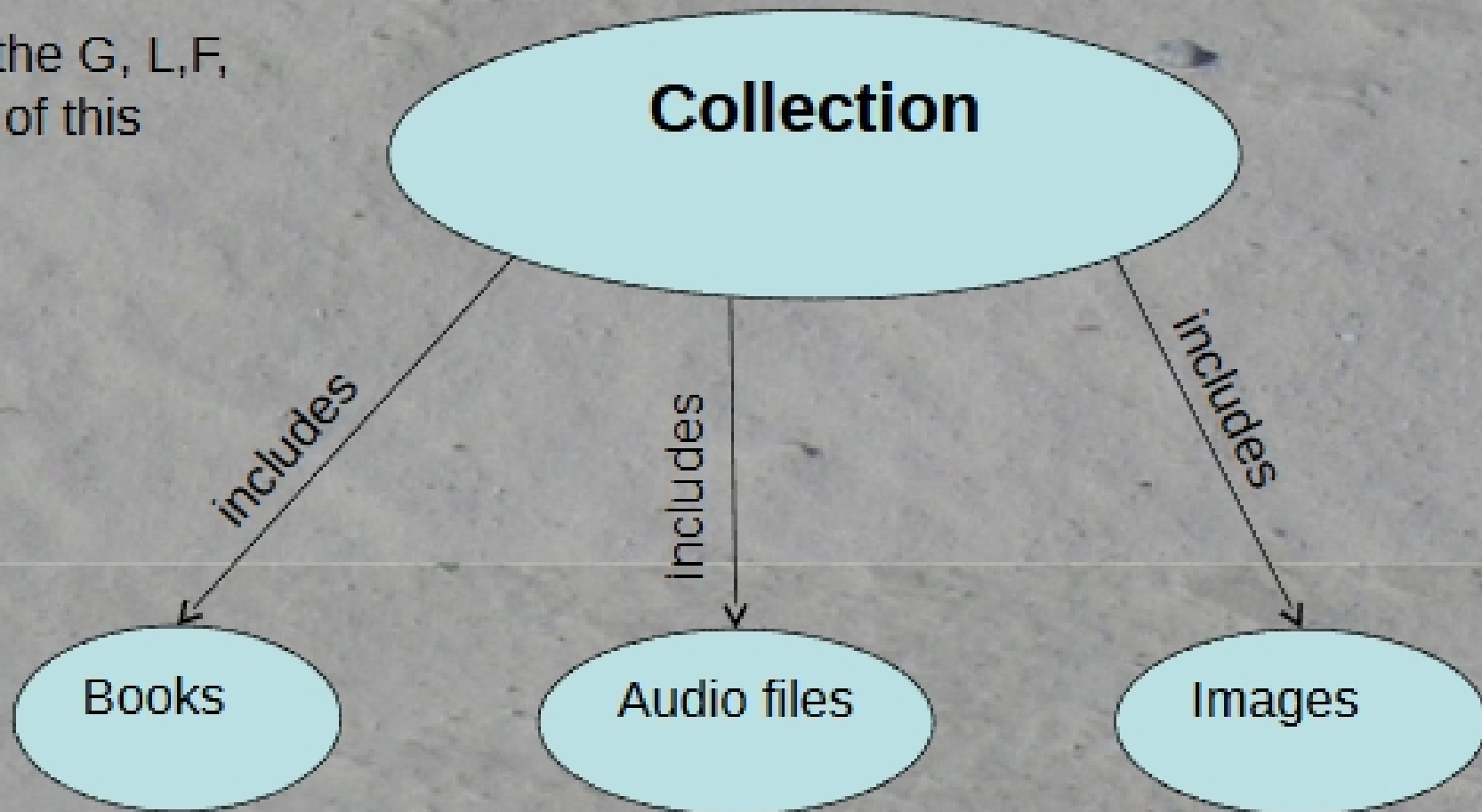
- Definition: A **stream** is a sequence whose codomain is a non empty set.
- Definition: A **structure** is a tuple  $(G, L, F)$  where  $G = (V, E)$  is a directed graph with vertex set  $V$  and edge set  $E$ ,  $L$  is a set of label values, and  $F$  is a labeling function.  $F : (V \cup E) \rightarrow L$ .

See <http://www.mathsisfun.com/sets/domain-range-codomain.html> for a nice description of domain, range, codomain if you need it.



# Structure illustration

What are the G, L,F, V, E parts of this example?



A very simple structure. How might it be enhanced? How would an index be included? What substructures might be added?

