***Example One:*** *Mary Smith is an analyst at XYZ Corporation. She has been asked to create a conceptual data model using an entity relationship diagram of the proposed project request system.*

At XYZ Corp., each employee is assigned to a specific department. An employee can only belong to one department. Employees can be assigned to work on many projects.

Create an ERD for the project request system.

Identify and draw the entities (nouns).

Identify and draw the relationships between the entities (verbs).

Identify and draw the cardinality relationships.

***Example Two:*** *Brown Consultants is a very prestigious consulting company that is having difficulties keeping track of the various consultants and the projects they are working on. Please read the initial requirements below to create an entity relationship diagram.*

Each department in the company has a supervisor and at least one consultant. Consultants must be assigned to at least one, but possibly more departments. At least one consultant is assigned to a project, but a consultant may be on vacation and not assigned to any projects.

The important data fields (attributes) that are needed for this system are the names of the departments, projects, supervisors and consultants, as well as the supervisor and consultant number and a unique project number.

1. First start by underlining all the nouns and circling all the associated verbs.
2. Determine which entities/nouns have a relationship with other entities/nouns.
3. Start by creating the entity relationship diagram by drawing the entities in the proper order.
4. Determine the verb label to use for each relationship/association.
5. Fill in the cardinality.
6. List the attributes associated with each entity.
7. Define identifiers for each entity.