Verbs to replace weak verbs

Relational Verbs

Stylistically, formal academic English tends to avoid overuse of the **weak verbs** "to be" or "to have." One way to avoid these weak verbs is to use **action verbs**, which indicate the relationship between two concepts. The following verbs are commonly used to orient the reader by *categorizing* concepts or *describing* their characteristics and features in terms of their *behavior, composition*, and *function*. Since these characteristics concern facts or "*eternal truths*" about the concept described, these comments are usually expressed using the *present tense*.

[PARTS] -→ [WHOLE]	[WHOLE] →[PARTS]
compose	is composed of
constitute	comprise (UK)
represent	*is comprised of (USA)
form	consists of
*make up	
	embodies
*belong to	
pertain to	incorporates
	encompasses
are involved in	*covers
are included in	subsumes
serve as	integrates
	involves
	includes
	entails
pertain to are involved in are included in	encompasses *covers subsumes integrates involves includes

* these verbs may be considered too informal for academic writing

Examples:

Canada, Mexico and the USA constitute North America.

Our solar system **comprises** one star, nine major planets, and numerous moons.

Reverse engineering involves taking a product or computer code, breaking it down, and analyzing it.

[FEATURE] = [CLASS]	[CLASS] = [FEATURE]
represents forms corresponds to indicates implies signals	is characterized by accounts for + percent% totals

Examples:

The modern climate of the middle Atlantic region **is characterized by** hot and humid summers and moderately cold winters.

Robots together with various levels of expert systems **form/represent** the latest in automation on the plant floor.

Labelling Verbs

In addition to these verbs, a number of other verbs are used to orient the reader by *labelling* phenomena, concepts, and categories. These verbs are often accompanied by *quotation marks* (''...''). Examples of these include:

[MEANING]→ [LABEL]	[LABEL] →[MEANING]
be referred to as be known as be designated as be called defines *stands for *means	denote designate refer to be defined as signify

Examples:

The production of a new part from the features of an existing part **is referred to as** reverse engineering.

Reverse Engineering **is defined as** the analysis of a device or object to determine its structure or function.

The acronym CAD **denotes** Computer Aided Design.

The skull and bones symbol **designates** substances that are toxic and should not come into contact with the human body

Locational Verbs

Many novice writers also overuse the verb "to be" when describing the physical location of objects. To avoid this, use **Locational verbs**:

$\textbf{[OBJECT]} \rightarrow \textbf{[LOCATION]}$

be located (at/in/on) be positioned (at/in/on) be fixed (to) be attached (to) be connected (to) be fastened (to) be joined (to)

Examples:

Fifty seven percent of all tropical rainforests are located in Latin America.

The fuel cell is as large as a credit card and **is attached to** the back of a mobile phone.