

## Explanations and Procedural Recounts: Comparison Chart

Developed by Ruslana Westerlund

Explanations	Procedural Recounts
<p><b>Explain why or how things are or how things work.</b> Each type of explanation has its own purpose (e.g., <b>Causal Explanation:</b> explain how something works including what causes what to happen, e.g., <i>how <b>electricity</b> works</i>).</p>	<p><b>Tell what was done or how a problem was solved</b> (e.g., <i>how <b>we made an electric circuit</b>/how we solved a problem</i>). Procedural recounts are frequent in math and science.</p>
<p><b>The biggest difference between these two is that while <i>explanations are phenomenon-centered (how does electricity work? Why do we have hiccups?)</i>, procedural recounts are activity-centered (what we did in an experiment and in what order).</b></p>	
<p style="text-align: center;"><b>Explanations<sup>1</sup></b></p> <p><i>Electricity requires a path to flow through. For electricity to work, it needs an energy source such as a battery. It requires a conductor, a special wire that carries energy from one end of the source which connects back to the source at the other end. It creates a closed circuit for electricity to flow through. That's how electricity works.</i></p>	<p style="text-align: center;"><b>Procedural Recounts</b></p> <p><i>I will tell you how I built an electric circuit. First I collected the materials: a copper wire, an LED light, tape, and two small button batteries. Then I put the two button batteries together (facing the same direction so that + on one battery is touching the – on the other). I taped two pieces of wire onto the batteries, one on the top and one on the bottom. That's how I made my electric circuit.</i></p>
<p><b>Organization (Discourse Level)</b></p>	
<ul style="list-style-type: none"> <li>● Identifying statement/statement of phenomenon</li> <li>● Explanation sequence (with a causal element)</li> <li>● Grades PK-2 labeled diagrams, Grades 3+ written explanations with labeled diagrams (Brisk, 2023)</li> <li>● Summary statement (optional)</li> <li>● Explanations can be written as stand-alone texts or part of a macro genre (e.g., an information report about volcanoes might also include an explanation about how a volcano erupts).</li> </ul>	<ul style="list-style-type: none"> <li>● Aim (purpose of procedure: I will show we solved a math problem/built an electric circuit)</li> <li>● Sequence of steps (no causal element) *precise order, cannot skip events</li> <li>● In math procedural recounts, the order of operations is very tight and steps cannot be moved around</li> <li>● Evaluation of reasoning in math, otherwise this final “conclusion” is not required.</li> </ul>
<p><b>Sentence Level</b></p>	
<p><b>Types of Sentences:</b></p> <ul style="list-style-type: none"> <li>● Simple sentences with embedded clauses to add definitions</li> <li>● Complex sentences with, <i>when, if, or after</i> clauses to <b>express what caused what to happen</b> (e.g., <i>When the electricity flows..., this happens</i>)</li> <li>● Compound sentences with two independent clauses</li> </ul>	<p><b>Types of Sentences:</b></p> <ul style="list-style-type: none"> <li>● Simple sentences to list steps (<i>First, we immersed it into the cold .... Then... </i>)</li> <li>● Compound sentences with two independent clauses</li> </ul>

<sup>1</sup> Explanations can be: Sequential, Causal, Factorial, Consequential, Systems, Cyclical, Conditional (Brisk, 2023)

Explanations	Procedural Recounts
<p><b>Tense:</b> Timeless Present to talk about how things always/usually are (e.g., frogs <i>hatch</i>, electricity <i>conducts</i>, clouds <i>form</i>)</p>	<p><b>Tense:</b> Past tense (<i>put, added, connected, multiplied, etc</i>)</p>
<p><b>Voice:</b> Passive Voice (e.g., <i>is transmitted, is conducted, is carried, the wire <u>was connected</u></i>)</p>	<p><b>Voice:</b> Active Voice focusing on the doer of the action (<i>We <u>connected</u> the battery to the copper wire</i>).</p>
<p><b>Types of verbs:</b></p> <ul style="list-style-type: none"> <li>• Mostly action verbs (technical words indicating processes: <i>conducts, transmits, carries, evaporates</i>)</li> <li>• Relational verbs <i>to be/have</i> (batteries <u>are</u> a type of stored energy)</li> <li>• Action verbs used to describe what happened</li> <li>• Verbs that give information about</li> <li>• Some existential verbs (indicate a state <i>there is/are/was/were</i>)</li> </ul>	<p><b>Types of verbs:</b></p> <ul style="list-style-type: none"> <li>• Mostly action verbs (what did participants do like <i>loaded, pointed</i>) to talk about what we did in the science experiment</li> <li>• Some relational verbs <i>is/are</i> but in past tense (typically)</li> <li>• Thinking verbs and verb groups that tell what we did in the math problem following the order of operations (e.g., <i>added, multiplied, jumped to find, solved, subtracted</i>)</li> </ul>
<p><b>Word/Phrase Level</b></p>	
<p><b>Noun groups:</b></p> <ul style="list-style-type: none"> <li>• Describe the noun accurately with <b>technical</b> pre-modifiers specific to the content area (not just adjectives: including info about what kind, how many, what type (e.g., <i>positive side of the battery, the newly hatched tadpole</i>.)</li> </ul>	<p><b>Noun groups:</b></p> <ul style="list-style-type: none"> <li>• Describe the noun accurately with <b>technical</b> pre-modifiers specific to the content area (not just adjectives: including info about what kind, what size, what temperature, how many, etc. e.g., <i>the numerals in the denominator, graduated cylinder, 500 ml beaker</i>)</li> </ul>
<p><b>Adverbials:</b></p> <ul style="list-style-type: none"> <li>• Place, manner, and time (prepositional phrases used as an adverb to modify a verb) <i>on the right negative side, around the copper wire</i></li> </ul>	<p><b>Adverbials:</b></p> <ul style="list-style-type: none"> <li>• Place, manner, and time (prepositional phrases used as an adverb to modify a verb) <i>on the right negative side, around the copper wire</i></li> </ul>
<p><b>Cohesion:</b></p> <ul style="list-style-type: none"> <li>• No personal pronouns, because explanations are phenomenon-based</li> <li>• Pronouns “it, they” used to refer to a noun that has already been named</li> <li>• The article <i>the</i> when used to refer to something that has already been named</li> <li>• Connecting words that signal the CAUSAL relationship.</li> <li>• Textual reference (This, those, these) referring back to whole paragraph or previous sentences (e.g., <i><u>This</u> is called echolocation.</i>)</li> <li>• Nominalization to refer back to the whole process (e.g., <i>the water goes up to the sky = the evaporation</i>)</li> </ul>	<p><b>Cohesion:</b></p> <ul style="list-style-type: none"> <li>• Personal pronouns to name who did the experiment or solved a problem</li> <li>• Pronouns “it, they” used to refer to a noun that has already been named</li> <li>• The article <i>the</i> when used to refer to something that has already been named</li> <li>• Sequence words signaling steps in the recount</li> <li>• Textual reference (This, those, these) to refer back to what was accomplished (e.g., <i><u>This</u> is how we built an electric circuit/<u>this</u> is how I solved the problem</i>)</li> </ul>