

Appendix

Figure A1

Chat Template

PST Playing Teacher:	X	Chat time:	X
PST Playing Student:	X	Student:	X

Role	Chat text
Teacher	X
Student	X
Teacher	X
Student	X
Teacher	X
Student	X
Teacher	X
Student	X
Teacher	X
Student	X
Teacher	X
Student	X
Teacher	X
Student	X
Teacher	X
Student	X

Figure A2

Example of Completed Template

PST Playing Teacher:	Tricia (pseudonym)	Chat time:	7 minutes
PST Playing Student:	Shanae (pseudonym)	Student:	Dana

Role	Chat text
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Teacher	Hi Dana! what did you notice when completing the paper experiment?
Student	I noticed that the paper changed into three forms.
Teacher	What did you notice about each papers weight?
Student	They all weighed 4.6 grams
Teacher	What do you think that means about the conservation of matter?
Student	I think that the water's matter was conserved.
Teacher	Why do you think that?
Student	I think because they all weighed the same, so the matter stays the same.
Teacher	Great! Let's move on to the water experiment! What did you notice about the water before and after freezing it?
Student	The unfrozen water was 390.5 grams and the frozen was 390.5 grams.
Teacher	That's great! did you notice any difference of the water?
Student	Yes the form of water. No when talking about weight.
Teacher	Can you explain more? Did you notice a change in what the water looked like?
Student	Yes the water froze but they both weighed 390.5 grams so maybe it didn't change.
Teacher	Did the water level change from where we marked it after being frozen?
Student	I don't remember.
Teacher	That's okay! So the water did raise 1 cm above the bottle label but it still weighed the same. What does that tell you about its matter?
Student	It stayed the same because it weighed the same

Note. This example is from the chat shown in Figure 1.