The scenario

Subject	Iodine transformations
Length	3,16 min.
Main objectives	To study the properties of iodine
Detailed objectives	Observation of changes occurring during a reaction, the definition of the physical phenomenon
Structure and description of experiments:	
Introduction	Sublimation is a phase transition from a solid to a gaseous state, bypassing the liquid state. The phenomenon opposite to sublimation is resublimation, i.e. the transformation of a gas into a solid. Sublimation and resublimation are physical transformations involving a change in the physical properties of a given physical body.
Main subject	Description: Study of the phase transition from solid to gaseous phase on the example of iodine. Discussion of physical transformations. Learning the properties of iodine.
Part 1	**Materials:** test tubes, test tube holder, spirit or gas burner, glass spatula, Pasteur pipette **Reagents:** Iodine **Precautions:** iodine - toxic, corrosive. **Description:** Place a test tube in a holder. Pour a few iodine crystals into the test tube. Carefully place the test tube in the flame of a burner under an efficient fume hood and gently heat it up. Observe the behavior of iodine when heated. After the tube has been set aside and cooled, check the appearance of the upper parts of the tube walls. Write down your observations. After completing the experiment, place the leftovers in properly marked waste containers. **Questions:** 1. Write down your observations of the transformation taking place 2. What is the name of the transformation that iodine underwent during heating? 3. What everyday substances contain elemental iodine? **Conclusions:** Under normal conditions, iodine undergoes sublimation, i.e. changes from a solid to a gaseous phase. When the dark purple iodine crystals are heated, they turn into purple gas. When the test tube is cooled, the purple gas turns into a fine shimmering powder, i.e. the

	reverse process to sublimation occurs, i.e. re-sublimation, i.e. the change of the gas phase into a solid.
	Level: Primary school