

# important hints:

- Watch movie from 5:00 AM and answer question until 23:00.
- Answer weekend questions until Monday evening.
- Answer exactly once. Answers cannot be changed.
- In case of questions, ask them before answering via contact form.
- Start with two jokers. Gain another joker by watching 10 solution movies. Jokers are played automatically in case of need.

# **Shopping list for PiA - Physics in Advent 2017**

## www.physik-im-advent.de

1.)

- a plate of milk chocolate (no nuts)
- cutting board
- kitchen knife
- lamp or heater for warming the knife

2.)

- two tablespoons
- a water tap

3.)

- smartphone with camera function
- shoebox
- yoghurt or jam jars with lid
- water (and if available food color)
- transparent document cover
- strong adhesive tape
- piece of foam rubber or styrofoam (5 cm \* 20 cm)

4.)

- · cup with handle
- spoon

5.)

two 20 or 50 cent coins

6.)

pine cone

7.)

- plate
- dish soap
- paperclip
- rubber band

8.)

- raw egg
- kitchen salt
- dark board or plate

9.)

- two small glasses, e.g. shot glasses
- water cooker or hot tap water
- two different food colours, e.g. blue and yellow
- smooth plastic card the size of a credit card

10.)

- tealight
- bowl
- ruler or something similarly shaped, at least 30 cm long and 3 cm wide





## 11.)

- fork
- tablespoon
- match
- empty bottle or glass

#### 12.)

smartphone with phyphox app

## 13.)

• bottle of water

## 14.)

- empty flavour vial (for baking)
- empty PET bottle
- water

#### 15.)

• 2-3 mm wide household rubber band

## 16.)

- kitchen scale
- large transparent glass/bucket (at least 3-4 l)
- bucket (at least 0.5 l)
- 0.5 I PET bottle
- 500 g of cooking salt
- small balloon (water bomb)

## 17.)

- a teaspoon
- a tablespoon
- 1 m packaging cord

## 18.)

- a raw egg
- a hard-boiled egg
- ruler
- cutting board
- some soft towels

## 19.)

• empty cardboard roll (empty paper towel roll)

## 20.)

- slotted ladle (about 10 cm in diameter with holes)
- dish soap
- water
- lamp

## 21.)

- peach
- wine glass, sufficiently large for the peach to fit in
- sparkling water with a lot of carbonation

## 22.)

• empty toilet paper roll or paper towel roll

## 23.)

- postcard
- lamp

## 24.)

- 1-liter sealable storage bag
- tap water
- 3-5 pencils or coloured pencils
- sink or bath tub

