Kompas pre deti / pozorovanie a papier

Pôvodné listy; ostré a magnetické pomôcky iba dospelý

Aktivita je pozorovanie magnetizovanej ihly na plaváku. Nie je to návod na orientáciu v teréne, záchranu ani určenie presného zemepisného severu. Papierová ružica sama nič nemeria.

Ihlu, magnet, rezanie korku a všetku manipuláciu s ihlou vykonáva iba dospelý. Dieťa môže pripraviť papier, vysloviť odhad, pozorovať a zapisovať. Použite nepoškodený vhodný školský magnet podľa označenia, nie voľné malé silné magnety alebo magnetické guľôčky.

Dospelý si pripraví plytkú nekovovú misku, vodu, stabilný malý korkový plavák, oceľovú ihlu vhodnú na magnetizovanie, magnet a bežný kompas na porovnanie. Najprv skúsi jednu zostavu bez detí pri ostrých pomôckach.

Jedným pólom magnetu prechádza po ihle stále rovnakým smerom, späť magnet zdvihne mimo ihly. Asi 20 ťahov je východisko zo zdrojových návodov, nie záruka. Nemení stranu magnetu pri každom ťahu. Ihlu nezahrieva.

Ihlu položí vodorovne na plavák; proti posunutiu ju môže uchytiť malou vhodnou páskou cez stred. Položí zostavu na vodu tak, aby sa ani konce nedotýkali steny či dna. Magnet a ostatné rušivé veci odloží.

Po upokojení vody porovná smer s bežným kompasom mimo blízkeho magnetu. Špička ihly nemusí byť severný koniec. Bez porovnania označujte len konce A/B a pozorovanú os, nie istý sever.

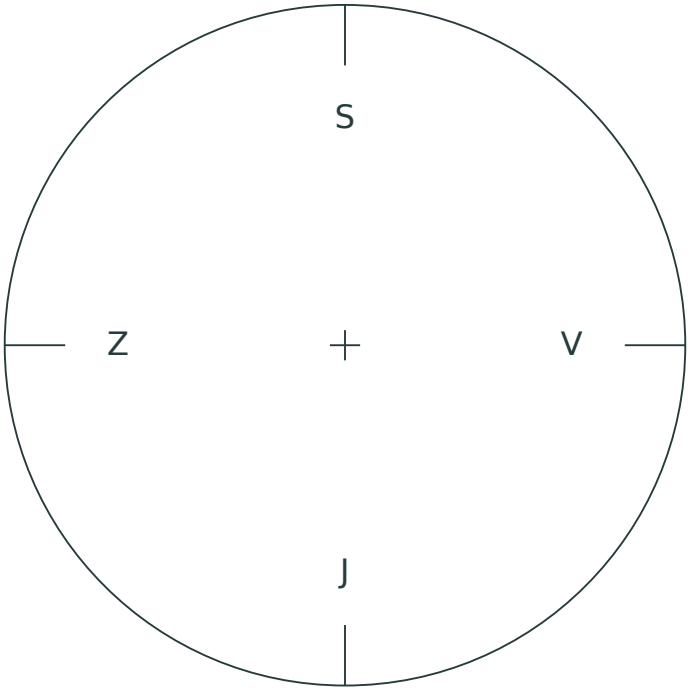
Strana 2: dve papierové ružice s priemerom 90 mm (4 a 8 smerov). Strana 3: päť prázdnych záznamov. Strana 4: štyri kartičky 80 × 50 mm. Strana 5: samostatná papierová hra v mriežke. Strany 6–8: úplná licencia písma.

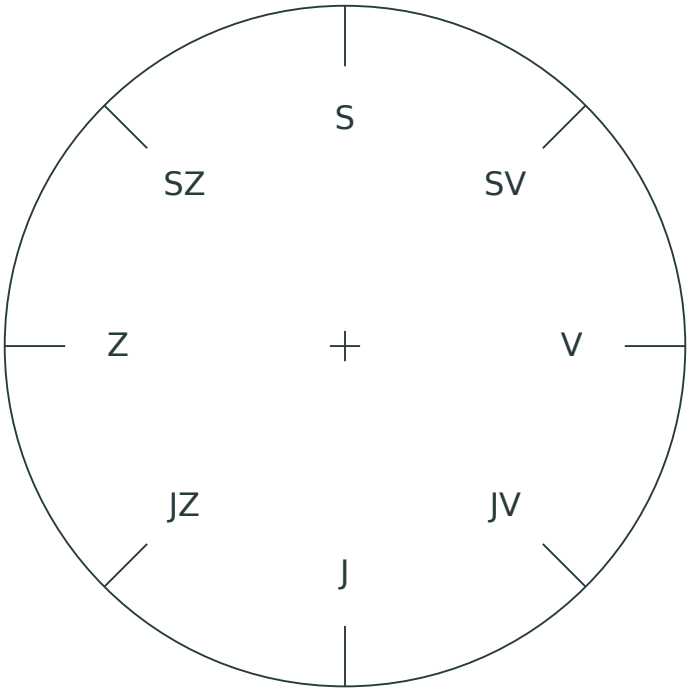
Tlač A4 na výšku, jedna strana na hárok, Skutočná veľkosť alebo 100 %. Zmerajte úsečku 100 mm a priemer 90 mm, pri kartičkách aj 80 × 50 mm. Rozmery sú pre papier, nie pre výrobu drevenej buzoly.

Po skončení dospelý spočíta a bezpečne odloží ihlu aj magnet a vyleje vodu. Papier zostáva suchý. Pôvodné grafiky, texty a pomôcky drevenefotografie.sk, 2026, s pomocou AI. Bezplatné osobné, školské aj komerčné fyzické použitie; samostatný predaj digitálnych súborov je zakázaný. Úplná samostatná licencia písma je priložená. Papierová ružica nie je snímač ani overená navigačná pomôcka. Digitálna kontrola nenahrádza fyzický pokus.

Svetové strany / dve ružice Ø 90 mm

Slovenské značky: S sever, V východ, J juh, Z západ







Kontrola 100 mm / A4, 100 % / drevenefotografie.sk

Vlastný záznam / päť pozorovaní

Nevypĺňajte očakávaný výsledok ako skutočné pozorovanie

Predpoklad: _____

Rovnaká zostava a miesto: _____

Porovnávací kompas / overený koniec: _____

Č.	Podmienka	Čo sa stalo	Poznámka
1			
2			
3			
4			
5			

Príklad PODMIENKY: magnet odložený / magnet priblížený / znovu odložený.

Neistý alebo neustálený smer je tiež výsledok pozorovania.

Kartičky / štyri svetové strany

4 obdĺžniky 80 × 50 mm / papierová pomôcka, nie kompas

SEVER

S

VÝCHOD

V

JUH

J

ZÁPAD

Z

Kartičky rozložte až podľa dohodnutej orientácie. Ich položenie nepreukazuje smer v miestnosti.

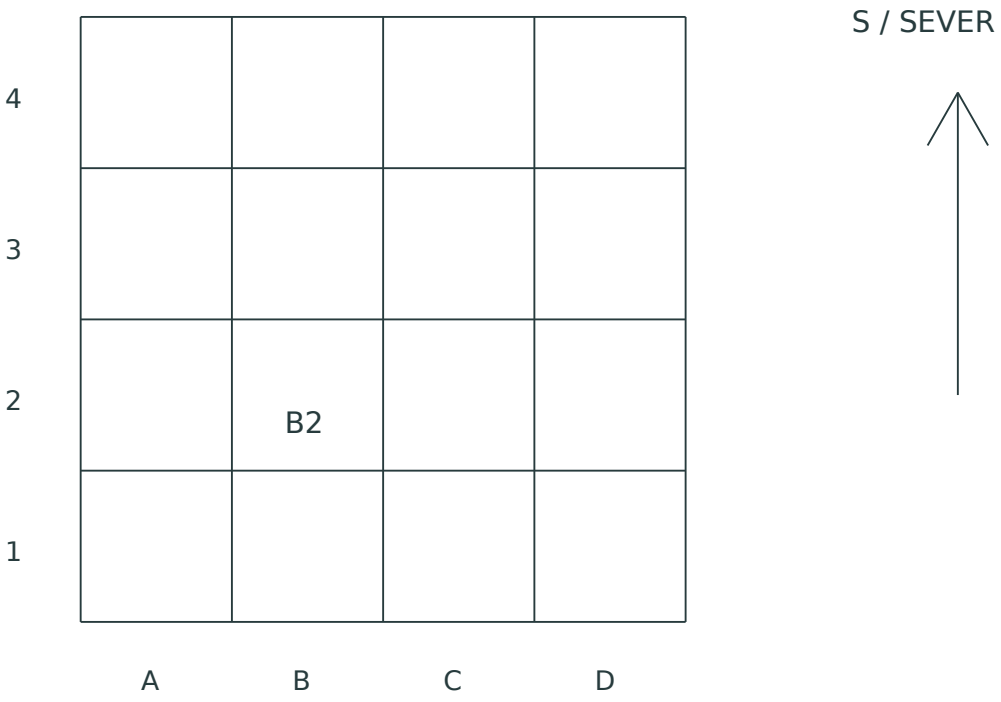
Pozor na jazyky: slovenské S je SEVER, anglické S je SOUTH (JUH). Anglické označenia N/E/S/W preto neprepisujte bez prekladu.

Na papierovej hre je sever určený vytlačenou šípkou. Pri reálnom pozorovaní sa ružica zarovnáva až podľa overeného konca ihly.

Kontrola 100 mm / A4, 100 % / drevenefotografie.sk

Papierová hra / smer určuje šípka

Mriežka je vymyslená. Nezobrazuje sever skutočnej miestnosti.



1. Z B2 o jedno políčko na východ: _____

2. Z B2 o dve políčka na sever: _____

3. Z B2 o jedno políčko na juh: _____

4. Z B2 o jedno políčko na západ: _____

5. Z B2 o jedno políčko na severovýchod: _____

Riešenia papierovej logiky: 1 C2 / 2 B4 / 3 B1 / 4 A2 / 5 C3.

Nie výsledky fyzického pokusu ani trasa na navigáciu.

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